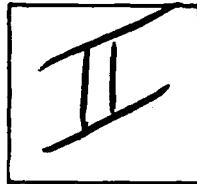


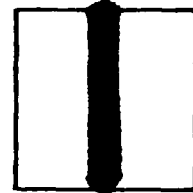
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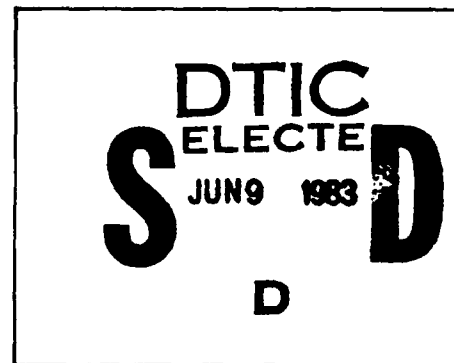
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To further expand this Data Series and to facilitate current research studies, this Master Index combines all of the indexes in each of the 13 individual volumes. This Master Index should be used as a first reference book which the researcher should consult to become acquainted with the contents and coverage of this extensive Data Series on thermophysical properties. Also, this index summarizes the numerous changes in names and groups of materials which have been reported in this data series.

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**THERMOPHYSICAL PROPERTIES OF MATTER**  
**The TPRC Data Series**

A Comprehensive Compilation of Data by the  
Thermophysical Properties Research Center (TPRC), Purdue University

**Y. S. Touloukian, Series Editor**  
**C. Y. Ho, Series Technical Editor**

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Volume 1.	Thermal Conductivity—Metallic Elements and Alloys
Volume 2.	Thermal Conductivity—Nonmetallic Solids
Volume 3.	Thermal Conductivity—Nonmetallic Liquids and Gases
Volume 4.	Specific Heat—Metallic Elements and Alloys
Volume 5.	Specific Heat—Nonmetallic Solids
Volume 6.	Specific Heat—Nonmetallic Liquids and Gases (and Supplement)
Volume 7.	Thermal Radiative Properties—Metallic Elements and Alloys
Volume 8.	Thermal Radiative Properties—Nonmetallic Solids
Volume 9.	Thermal Radiative Properties—Coatings
Volume 10.	Thermal Diffusivity
Volume 11.	Viscosity
Volume 12.	Thermal Expansion—Metallic Elements and Alloys
Volume 13.	Thermal Expansion—Nonmetallic Solids
Index Volume	Master Index to Materials and Properties

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New data on thermophysical properties are being constantly accumulated at TPRC. Contact TPRC and use its interim updating services for the most current information.

# **MASTER INDEX**

## **To Materials and Properties**

THERMOPHYSICAL PROPERTIES OF MATTER  
INDEX VOLUME

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**MASTER INDEX**  
**To Materials and Properties**

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Center for Information and Numerical Data Analysis and Synthesis  
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"In this work, when it shall be found that much is omitted, let it not be forgotten that much likewise is performed..."

**SAMUEL JOHNSON, A.M.**

From last paragraph of Preface to his two-volume *Dictionary of the English Language*, Vol. I, page 5, 1755, London, Printed by Strahan.

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## Foreword to the Series

In 1957, the Thermophysical Properties Research Center (TPRC) of Purdue University, under the leadership of its founder, Professor Y. S. Touloukian, began to develop a coordinated experimental, theoretical, and literature review program covering a set of properties of great importance to science and technology. Over the years, this program has grown steadily, producing bibliographies, data compilations and recommendations, experimental measurements, and other output. The series of volumes for which these remarks constitute a foreword is one of these many important products. These volumes are a monumental accomplishment in themselves, requiring for their production the combined knowledge and skills of dozens of dedicated specialists. The Thermophysical Properties Research Center deserves the gratitude of every scientist and engineer who uses these compiled data.

The individual nontechnical citizen of the United States has a stake in this work also, for much of the science and technology that contributes to his well-being relies on the use of these data. Indeed, recognition of this importance is indicated by a mere reading of the list of the financial sponsors of the Thermophysical Properties Research Center; leaders of the technical industry of the United States and agencies of the Federal Government are well represented.

Experimental measurements made in a laboratory have many potential applications. They might be used, for example, to check a theory, or to help design a chemical manufacturing plant, or to compute the characteristics of a heat exchanger in a nuclear power plant. The progress of science and technology demands that results be published in the open literature so that others may use them. Fortunately for progress, the useful data in any single field are not scattered throughout the tens of thousands of technical journals published throughout the world. In most fields, fifty percent of the useful work appears in no more than thirty or forty journals. However, in the case of TPRC, its field is so broad

that about 100 journals are required to yield fifty percent. But that other fifty percent! It is scattered through more than 3500 journals and other documents, often items not readily identifiable or obtainable. Over 85,000 references are now in the files.

Thus, the man who wants to use existing data, rather than make new measurements himself, faces a long and costly task if he wants to assure himself that he has found all the relevant results. More often than not, a search for data stops after one or two results are found—or after the searcher decides he has spent enough time looking. Now with the appearance of these volumes, the scientist or engineer who needs these kinds of data can consider himself very fortunate. He has a single source to turn to; thousands of hours of search time will be saved, innumerable repetitions of measurements will be avoided, and several billions of dollars of investment in research work will have been preserved.

However, the task is not ended with the generation of these volumes. A critical evaluation of much of the data is still needed. Why are discrepant results obtained by different experimentalists? What undetected sources of systematic error may affect some or even all measurements? What value can be derived as a "recommended" figure from the various conflicting values that may be reported? These questions are difficult to answer, requiring the most sophisticated judgment of a specialist in the field. While a number of the volumes in this Series do contain critically evaluated and recommended data, these are still in the minority. The data are now being more intensively evaluated by the staff of TPRC as an integral part of the effort of the National Standard Reference Data System (NSRDS). The task of the National Standard Reference Data System is to organize and operate a comprehensive program to prepare compilations of critically evaluated data on the properties of substances. The NSRDS is administered by the National Bureau of Standards under a directive from the Federal Council for Science



and Technology, augmented by special legislation of the Congress of the United States. TPRC is one of the national resources participating in the National Standard Reference Data System in a united effort to satisfy the needs of the technical community for readily accessible, critically evaluated data.

As a representative of the NBS Office of Standard Reference Data, I want to congratulate Professor Touloukian and his colleagues on the accomplishments represented by this Series of reference data

books. Scientists and engineers the world over are indebted to them. The task ahead is still an awesome one and I urge the nation's private industries and all concerned Federal agencies to participate in fulfilling this national need of assuring the availability of standard numerical reference data for science and technology.

EDWARD L. BRADY  
*Associate Director for Information Programs  
National Bureau of Standards*

## Preface to the Series

*Thermophysical Properties of Matter*, the TPRC Data Series, is the culmination of twenty years of pioneering effort of the Thermophysical Properties Research Center (TPRC), one of the operating centers of the Center for Information and Numerical Data Analysis and Synthesis (CINDAS) at Purdue University, in the generation of tables of numerical data for science and technology. It constitutes the restructuring, accompanied by extensive revision and expansion of coverage, of the original *TPRC Data Book*, first released in 1960 in loose-leaf format, 11"×17" in size, and issued in June and December annually in the form of supplements. The original loose-leaf *Data Book* was organized in three volumes: (1) metallic elements and alloys; (2) nonmetallic elements, compounds, and mixtures which are solid at N.T.P., and (3) non-metallic elements, compounds, and mixtures which are liquid or gaseous at N.T.P. Within each volume, each property constituted a chapter.

Because of the vast proportions the *Data Book* began to assume over the years of its growth and the greatly increased effort necessary in its maintenance by the user, it was decided in 1967 to change from the loose-leaf format to a conventional publication. Thus, the December 1966 supplement of the original *Data Book* was the last supplement disseminated by TPRC.

While the manifold physical, logistic, and economic advantages of the bound volume over the loose-leaf oversize format are obvious and welcome to all who have used the unwieldy original volumes, the assumption that this work will no longer be kept on a current basis because of its bound format would not be correct. Fully recognizing the need of many important research and development programs which require the latest available information, TPRC has instituted a *Data Update Plan* enabling the subscriber to inquire, by telephone if necessary, for specific information and receive, in many instances, same-day response on any new data processed or revision of published data since the latest edition. In

this context, the TPRC Data Series departs drastically from the conventional handbook and giant multivolume classical works, which are no longer adequate media for the dissemination of numerical data of science and technology without a continuing activity on contemporary coverage. The loose-leaf arrangements of many works fully recognize this fact and attempt to develop a combination of bound volumes and loose-leaf supplement arrangements as the work becomes increasingly large. TPRC's *Data Update Plan* is indeed unique in this sense since it maintains the contents of the TPRC Data Series current and live on a day-to-day basis between editions. In this spirit, I strongly urge all purchasers of these volumes to complete in detail and return the *Volume Registration Certificate* which accompanies each volume in order to assure themselves of the continuous receipt of annual listing of corrigenda during the life of the edition.

The TPRC Data Series consists of 13 independent volumes. The first seven of these volumes were published in 1970, Volumes 8 and 9 in 1972, Volume 10 in 1973, Volumes 11 and 12 in 1975, and a Supplement to Volume 6 and Volume 13 in 1976. The organization of the TPRC Data Series makes each volume a self-contained entity available individually without the need to purchase the entire Series.

The coverage of the specific thermophysical properties represented by this Series constitutes the most comprehensive and authoritative collection of numerical data of its kind for science and technology.

Whenever possible, a uniform format has been used in all volumes, except when variations in presentation were necessitated by the nature of the property or the physical state concerned. In spite of the wealth of data reported in these volumes, it should be recognized that all volumes are not of the same degree of completeness. However, as additional data are processed at TPRC on a continuing basis, subsequent editions will become increasingly more

complete and up to date. Each volume in the Series basically comprises three sections, consisting of a text, the body of numerical data with source references, and a material index.

The aim of the textual material is to provide a complementary or supporting role to the body of numerical data rather than to present a treatise on the subject of the property. The user will find a basic theoretical treatment, a comprehensive presentation of selected works which constitute reviews, or compendia of empirical relations useful in estimation of the property when there exists a paucity of data or when data are completely lacking. Established major experimental techniques are also briefly reviewed.

The body of data is the core of each volume and is presented in both graphical and tabular formats for convenience of the user. Every single point of numerical data is fully referenced as to its original source and no secondary sources of information are used in data extraction. In general, it has not been possible to critically scrutinize all the original data presented in these volumes, except to eliminate perpetuation of gross errors. However, in a significant number of cases, such as for the properties of liquids and gases, the thermal conductivity and thermal diffusivity of all the elements, and the thermal expansion of most materials in all material categories, the task of full evaluation, synthesis, and correlation has been completed. It is hoped that in subsequent editions of this continuing work, not only new information will be reported but the critical evaluation will be extended to increasingly broader classes of materials and properties.

The third and final major section of each volume is the material index. This is the key to the volume, enabling the user to exercise full freedom of access to its contents by any choice of substance name or detailed alloy and mixture composition, trade name, synonym, etc. Of particular interest here is the fact that in the case of those properties which are reported in separate companion volumes, the material index in each of the volumes also reports the contents of the other companion volumes.\* The sets of companion volumes are as follows:

Thermal conductivity:	Volumes 1, 2, 3
Specific heat:	Volumes 4, 5, 6, 6S
Radiative properties:	Volumes 7, 8, 9
Thermal expansion:	Volumes 12, 13

\*For the first edition of the Series, this arrangement was not feasible for Volumes 6S, 7, 8, and 12 due to the sequence and schedule of their publication, and the Supplement to Volume 6 (Volume 6S) carries its own independent material index.

The ultimate aims and functions of TPRC's Data Tables Division are to extract, evaluate, reconcile, correlate, and synthesize all available data for the thermophysical properties of materials with the result of obtaining internally consistent sets of property values, termed the "recommended reference values." In such work, gaps in the data often occur, for ranges of temperature, composition, etc. Whenever feasible, various techniques are used to fill in such missing information, ranging from empirical procedures to detailed theoretical calculations. Such studies are resulting in valuable new estimation methods being developed which have made it possible to estimate values for substances and/or physical conditions presently unmeasured or not amenable to laboratory investigation. Depending on the available information for a particular property and substance, the end product may vary from simple tabulations of isolated values to detailed tabulations with generating equations, plots showing the concordance of the different values, and, in some cases, over a range of parameters presently unexplored in the laboratory.

The TPRC Data Series constitutes a permanent and valuable contribution to science and technology. These constantly growing volumes are invaluable sources of data to engineers and scientists, sources in which a wealth of information heretofore unknown or not readily available has been made accessible. We look forward to continued improvement of both format and contents so that TPRC may serve the scientific and technological community with ever-increasing excellence in the years to come. In this connection, the staff of TPRC is most anxious to receive comments, suggestions, and criticisms from all users of the volumes. An increasing number of colleagues are making available at the earliest possible moment reprints of their papers and reports as well as pertinent information on the more obscure publications. I wish to renew my earnest request that this procedure become a universal practice since it will prove to be most helpful in making TPRC's continuing effort more complete and up to date.

It is indeed a pleasure to acknowledge with gratitude the multisource financial assistance received from over fifty sponsors which has made the continued generation of these tables possible. In particular, I wish to single out the sustained major support received from the Air Force Materials Laboratory-Air Force Systems Command, the Defense Supply Agency, the Office of Standard Reference Data-National Bureau of Standards, and the Office of Advanced Research and Technology-National Aeronautics and Space Administration.

TPRC is indeed proud to have been designated as a National Information Analysis Center for the Department of Defense as well as a component of the National Standard Reference Data System under the cognizance of the National Bureau of Standards.

While the preparation and continued maintenance of this work is the responsibility of TPRC's Data Tables Division, it would not have been possible without the direct input of TPRC's Scientific Documentation Division and, to a lesser degree, the Theoretical and Experimental Research Divisions. The authors of the various volumes are the Senior staff members in responsible charge of the work. It should be clearly understood, however, that many have contributed over the years and their contributions are specifically acknowledged in each volume. I

wish to take this opportunity to personally thank those members of the staff, assistant researchers, graduate research assistants, and supporting graphics and technical typing personnel without whose diligent and painstaking efforts this work could not have materialized.

Y. S. TOULOUKIAN

*Director  
Center for Information and Numerical  
Data Analysis and Synthesis  
Distinguished Atkins Professor of Engineering*

Purdue University  
West Lafayette, Indiana  
November 1978

# Introduction to Index Volume

Now that the 13-volume *Thermophysical Properties of Matter – The TPRC Data Series* is completed, it may be quite appropriate and informative to have an overview of this Series which was published over the years 1970 to 1977. Statistical data on the Series, presented in the accompanying table, are self-explanatory and give an indication of the scope of this monumental work.

This 178-page Master Index to the 6362 individual materials and properties reported in the 13-volume Data Series is prepared with a dual purpose in mind. First, it will assist those who wish to use this work to rapidly

ascertain whether a particular property for a given substance is reported in the Series, and if so, on which page of which volume it is to be found. Secondly, and perhaps equally important, it will serve as a reference source for those who do not have this Series to determine if the property and substance or material of interest is covered by this encyclopedic work.

Naturally, each of the 14 books of the 13-volume Series (including the Supplement to Volume 6) has its own materials index. However, because of the unusually large size of the Series it was felt that an index to all

SUMMARY OF STATISTICAL DATA ON THERMOPHYSICAL PROPERTIES OF MATTER – THE TPRC DATA SERIES

	Number of pages	Number of data sets	Number of references	Number of materials
Volume 1: Thermal Conductivity – Metallic Elements and Alloys	1595	5539	1446	892
Volume 2: Thermal Conductivity – Nonmetallic Solids	1302	4627	1037	812
Volume 3: Thermal Conductivity – Nonmetallic Liquids and Gases	707	1505	1406	170
Volume 4: Specific Heat – Metallic Elements and Alloys	830	1186	789	322
Volume 5: Specific Heat – Nonmetallic Solids	1737	1009	518	550
Volume 6: Specific Heat – Nonmetallic Liquids and Gases	383	863	665	56
Volume 6 Supplement	169	726	878	307
Volume 7: Thermal Radiative Properties – Metallic Elements and Alloys	1644	5130	520	242
Volume 8: Thermal Radiative Properties – Nonmetallic Solids	1890	4971	576	782
Volume 9: Thermal Radiative Properties – Coatings	1569	5269	475	1161
Volume 10: Thermal Diffusivity	760	1733	568	445
Volume 11: Viscosity	801	1803	1595	188
Volume 12: Thermal Expansion – Metallic Elements and Alloys	1440	4253	872	672
Volume 13: Thermal Expansion – Nonmetallic Solids	1786	4990	1213	815
Totals	16,613	43,604	12,258	

14 volumes will add considerably to the ease of using these volumes as well as serve an integrating function.

In the preparation of the Master Index, the Editors had to reconcile what at first seemed to be certain inconsistencies among the index entries of individual volumes. In actuality, what seem to be editorial inconsistencies are the result of improvements in styling and in naming and grouping of materials that were introduced over the period of 1970 to 1977, when these fourteen volumes were published. Therefore, certain guidelines had to be adopted in the naming, styling, and alphabetization of this Master Index. These guidelines are summarized on the following pages.

It is hoped that no serious errors exist in this Master Index. Even though great care was exercised in its preparation, together with an attempt to insure consistency and appropriate cross indexing, it is possible that certain oversights may have occurred. Therefore, it is always advisable to look for materials under more than a single name entry whenever any ambiguity in naming exists.

As it is evident from the composition of the book, the index was prepared and formatted by a special text formatting computer program. This effort was the contribution of Dr. H. H. Li of the CINDAS staff, which the Editors wish to acknowledge.

# Guidelines to Indexing and Alphabetization

## 1. General Rules for Alphabetization

- a. Material names are arranged alphabetically and in increasing numerical order when relevant. However, hyphenated alphanumeric prefixes (e.g., *n*-, *p*-, *o*-, *iso*-, 2-, etc.) as well as Greek characters and notations such as +, -, or / used in names or in the styling of entries are ignored for alphabetization purposes. Whenever appropriate, prefixes to chemical name listings are given in italics.
- b. Abbreviations or acronyms are written with no punctuation or spacing between letters and are considered as words for purposes of alphabetization (e.g., AISI, ASTM, SAE, etc.).
- c. In alphabetizing a material with one or more modifier(s), the material name is separated from the modifier by a comma. Entries for the material without any modifier(s) are listed first, followed by entries for the same material name alphabetized according to the first modifier word. In the case of metals, when a national designation appears, this modifier is listed immediately after the material name.
- d. No entries are listed under modifier or descriptor terms as lead words. The same holds for trade names in general except for those few which have crept into common usage (e.g., Teflon, Freon; also R numbers for refrigerants, etc.). Modifiers always follow the specific material names or the generic or material class names to which they are attached. Examples are:

Aluminum oxide, Coors AD99  
Iron, cast  
Iron, gray  
Marble, black  
Marble, powder  
Steel, carbon  
Steel, stainless  
Paint, white  
etc.

- e. In listing mixtures of solids or fluids, the constituent substances are ordered alphabetically. Cermets are an exception to this rule, the oxide or the compound always being listed first.

## 2. Listing of Inorganic Compounds

- a. The convention of distinguishing a complex oxide from a salt is based on the criterion that the former designation is used when the electropositive element in the anion is a metal (e.g., calcium tungsten oxide,  $\text{CaO} \cdot \text{WO}_3$ , is the correct naming rather than calcium tungstate,  $\text{CaWO}_4$ ).
- b. In the case of inorganic compounds, some constituent elements have multiple valence states. As a consequence, for a given pair of elements, two or more compounds are formed according to their valences. For example, the following chemical combinations of Cr and Si occur:

Chromium monosilicide	CrSi
Chromium disilicide	CrSi <sub>2</sub>
Trichromium silicide	Cr <sub>3</sub> Si
Trichromium disilicide	Cr <sub>3</sub> Si <sub>2</sub>
Pentachromium trisilicide	Cr <sub>5</sub> Si <sub>3</sub>
Hexachromium silicide	Cr <sub>6</sub> Si

In such a case the entry "chromium silicides" is used as a lead entry and the compounds within the group are listed by their chemical formula only, following the lead entry, i.e.,

### Chromium silicides:

CrSi  
CrSi<sub>2</sub>  
Cr<sub>3</sub>Si  
Cr<sub>3</sub>Si<sub>2</sub>  
Cr<sub>5</sub>Si<sub>3</sub>  
Cr<sub>6</sub>Si

## 3. Alloys and Steels

Alloys are listed in one or more of the following forms:

- a. *By the name of the predominant alloying element* as the name of the alloy, followed by a listing of different combinations of constituents. Only the two major constituents are listed: i.e., A + B +  $\Sigma X_i$ . The notation  $\Sigma X_i$  indicates the presence of additional lesser constituents. Binary alloys are listed first, followed



by multiple alloys. Examples are:

Aluminum alloys:	Nickel alloys:
Al + Co	Ni + Al
Al + Cu + $\Sigma X_i$	Ni + Cr
Al + Fe	Ni + Cr + $\Sigma X_i$
Al + Fe + $\Sigma X_i$	Ni + Fe + $\Sigma X_i$

Titanium alloys:  
Ti + Al  
Ti + Al +  $\Sigma X_i$

Together with each of the above entries one or more alloy designations may appear with modifiers such as: country of origin, alloy number, trade name, work or heat treatment, etc.

- b. Under *AISI*, *ASTM*, and *SAE* designations, e.g.,

AISI 310, stainless steel  
ASTM B265-58T, titanium alloy

In the above two cases the entries are also listed as

Steel, stainless, AISI 310  
and  
Titanium alloy, ASTM B265-58T

- c. Alloys are also cross-referenced under the entry "Steel" or "Steel, stainless" for each alloy separately listed under specific designations such as *AISI*, *ASTM*, *SAE*, or by common trade name.

From the above, it is evident that it is often advisable to look for alloys under entries for alloys of the predominant constituent as well as under *AISI*, *ASTM*, or *SAE* designations and under the word "Steel." Well recognized special alloys are also cross-listed individually under their trade names (e.g., *Alumel*, *Chromel*, etc.).

#### 4. Designation of Mixtures (Solid and Fluid), Cermets, and Intermetallic Compounds

- Mixtures of solids* of A + B + C + ... are separated by a plus (+) sign and are ordered alphabetically by the constituents' names. Binary mixtures are listed first, followed by mixtures of increasing numbers of constituents. The word "mixture" appears at the end of the entry, preceded by a comma.
- Cermets* are listed both under the name of the oxide or the elemental compound as well as under the general entry "Cermets." A plus (+) sign is used in the ordering of the constituents, with the oxide or compound always listed first. The word "cermet" appears at the end of the entry, preceded by a comma.
- Intermetallic compounds* are listed both under their conventional chemical name followed by the words

"Intermetallic Compound" as well as under the general heading of "Intermetallic Compounds." The constituents are separated by a dash (--).

- Fluid mixtures* of A-B-C-... are ordered in alphabetical order of their constituents, which are separated by a dash (-). The word "mixture" appears at the end of the entry. Binary mixtures are listed first, followed by mixtures of increasing numbers of constituents.

#### 5. Grouping of Common Materials: Bricks, Cements, Ceramics, Composites, Concretes, Enamels, Glasses, Graphites, Oxide Mixtures, Porcelains, Refractories, Rubbers, and Polymers

- Mixtures of oxides which are recognized as ceramics, enamels, glasses, porcelains, or refractories are listed under one of these lead names, followed by appropriate qualifiers. However, in the absence of uniform practice in the naming of such oxide mixtures, it is advisable to look under more than one name as well as under the listing of a given oxide or oxide mixture.
- Concretes, graphites, and composites are also general grouping designations used as lead words to bring like materials together. These words are followed by a simple description of their components or appropriate modifiers.

#### 6. Binders, Coatings, and Paints

These three terms are difficult to distinguish in practice in the search for materials data. They are all coatings which can be classified as pigmented coatings, contact coatings, and conversion coatings. For purposes of this index all coatings are listed under the lead words binder, coating, or paint in one of the following styles. Examples are:

Binder, 3M Kel-F 800 with zinc oxide pigment

or

Binder, 3M Kel-F 800 pigmented with:

Aluminum oxide  
Sodium sulfate + Titanium oxide  
Magnesium oxide  
Titanium oxide  
Zinc oxide  
etc.

Coating, Acrylic on Aluminum substrate

or

Coating, Acrylic on:

Ceramic substrate  
Epoxy substrate  
Glass substrate  
Polyurethane substrate  
Stainless steel substrate  
etc.

Paint, white velvet 3M

or

Paints, Fuller:

D-70-6342

Flat black decoret

Flat black silicone

Harvard Gray No. 2946

etc.

It is indeed hoped that this Master Index volume to the TPRC Data Series on thermophysical properties of materials will prove helpful in many ways to all seekers for numerical data by serving as a master key to a vast collection of mostly evaluated data.

# **Master Index to Materials and Properties**

Substance Name	Thermal Conduc-tivity		Specif. Heat		Thermal Radiative Properties				Thermal Diffu-sivity		Visco-sity		Thermal Expan-sion					
					Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Acetaldehyde	-	-	6s	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetamidophenol	-	-	6s	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetaminophenol	-	-	6s	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetic acid	-	-	6s	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetic ester	-	-	6s	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetic ether	-	-	6s	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	3	129	6	113	-	-	-	-	-	-	-	-	-	11	98	-	-	-
Acetone-benzene, mixture	3	440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetylaminophenol	-	-	6s	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetylene	3	133	6	117	-	-	-	-	-	-	-	-	-	11	100	-	-	-
Acetylene-air, mixture	3	381	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetylene dichloride	-	-	6s	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetylene tetrabromide	-	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetylene tetrachloride	-	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetylenogen	-	-	5	405	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acrylic	-	-	-	-	-	-	-	-	-	-	-	10	594	-	-	-	-	-
Adiprene C + lithafax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1520
ADP, ammonium dihydrogen phosphate	2	679	-	-	-	-	-	-	-	8	604	-	-	-	-	-	-	-
Aggregate, SII-O-Cel coarse grade, diatomite	2	1112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Air	3	512	6	293	-	-	-	-	-	-	-	10	518	11	608	-	-	-
Air-ammonia, mixture	3	442	-	-	-	-	-	-	-	-	-	-	-	11	624	-	-	-
Air-argon-carbon dioxide, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	602	-	-	-
Air-argon-carbon dioxide-helium, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	600	-	-	-
Air-argon-carbon dioxide-methane, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	603	-	-	-
Air-argon-helium-methane, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	601	-	-	-
Air-carbon dioxide, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	614	-	-	-
Air-carbon dioxide-helium, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	604	-	-	-
Air-carbon dioxide-helium-methane, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	605	-	-	-
Air-carbon dioxide-methane, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	616	-	-	-
Air-carbon monoxide, mixture	3	383	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Air-helium, mixture	3	318	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Air-helium-methane, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	606	-	-	-
Air-hydrogen chloride, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	626	-	-	-
Air-hydrogen sulphide, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	628	-	-	-
Air-methane, mixture	3	385	-	-	-	-	-	-	-	-	-	-	-	11	617	-	-	-
Air-steam, mixture	3	464	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AISI 11H steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1146
AISI 202 steel	-	-	-	-	-	-	-	-	-	-	-	10	339 340	-	-	-	-	-
AISI 301 stainless steel	1	1165	4	693	7	1221 1226	7	1269 1288	7	1300	-	10	345 348	-	-	-	12	1138 1141 1142
AISI 301 stainless steel, corrugated sheets	-	-	-	-	-	-	-	-	-	-	-	10	552	-	-	-	-	-











Substance Name	Thermal Conduc-tivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffu-sivity		Visco-sity		Thermal Expan-sion	
					Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Aluminum alloys: (continued)																		
Al + Fe + ΣX <sub>4</sub>	1	905	-	-	-	-	7	1090 1094	-	-	-	-	10	273	-	-	12	1027
Al + Fe + ΣX <sub>4</sub> , Al 1060	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	6
Al + Fe + ΣX <sub>4</sub> , Al 1075	-	-	-	-	-	-	7	28	-	-	-	-	-	-	-	-	-	-
Al + Fe + ΣX <sub>4</sub> , Al 1100	1	906 920	-	-	7	10 16	-	-	-	-	-	-	-	-	-	-	12	641
Al + Fe + ΣX <sub>4</sub> , Alclad 2024, anodized	-	-	-	-	-	-	9	1244 1252	-	-	-	-	-	-	-	-	-	-
Al + Fe + ΣX <sub>4</sub> , Alcoa 2S	1	906 920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	641
Al + Fe + ΣX <sub>4</sub> , anodized	-	-	-	-	-	-	9	1243 1251 1252	9	1253	-	-	-	-	-	-	-	-
Al + Fe + ΣX <sub>4</sub> , cond-Al	1	906	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al + Fe + ΣX <sub>4</sub> , L-34	-	-	-	-	-	-	7	1092 1095	-	-	-	-	-	-	-	-	-	-
Al + Fe + ΣX <sub>4</sub> , L-34, anodized	-	-	-	-	-	-	9	1252	9	1253	-	-	-	-	-	-	-	-
Al + Fe + ΣX <sub>4</sub> , J51	1	906	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al + Mg + ΣX <sub>4</sub>	1	908	-	-	7	1098 1100	7	1105	7	1110	-	10	276	-	-	-	12	1028
Al + Mg + ΣX <sub>4</sub> , Al 5052	1	478 909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1028 1030
Al + Mg + ΣX <sub>4</sub> , Al 5053-3	-	-	-	-	7	1101	-	-	-	-	-	-	-	-	-	-	-	-
Al + Mg + ΣX <sub>4</sub> , Al 5083	1	909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1028 1030
Al + Mg + ΣX <sub>4</sub> , Al 5086	1	909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al + Mg + ΣX <sub>4</sub> , Al 5154	1	478 909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al + Mg + ΣX <sub>4</sub> , Al 5456	1	909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1028 1030
Al + Mg + ΣX <sub>4</sub> , Al 6053	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1028
Al + Mg + ΣX <sub>4</sub> , Al 6061	-	-	-	-	7	1098	7	1106	7	1110	-	-	-	-	-	-	12	1028 1030
Al + Mg + ΣX <sub>4</sub> , Al 6063	1	909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al + Mg + ΣX <sub>4</sub> , Alcoa 52S	1	478 909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al + Mg + ΣX <sub>4</sub> , Alcoa 53S 0	-	-	-	-	7	1101	-	-	-	-	-	-	-	-	-	-	-	-
Al + Mg + ΣX <sub>4</sub> , Alcoa 61S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1030
Al + Mg + ΣX <sub>4</sub> , Alcoa 63S	1	909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al + Mg + ΣX <sub>4</sub> , anodized	-	-	-	-	-	-	9	1254 1255	-	-	-	-	-	-	-	-	-	-
Al + Mg + ΣX <sub>4</sub> , K186	1	909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al + Mg + ΣX <sub>4</sub> , LK183	1	909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al + Mg + ΣX <sub>4</sub> , RR 131D	1	909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al + Mn + ΣX <sub>4</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1034
Al + Mn + ΣX <sub>4</sub> , Al 3003	1	912	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1034 1036 13 616

Substance Name	Thermal	Specif.	Thermal Radiative Properties				Thermal	Visco-	Thermal	
	Conduc-	Heat	Emis-	Reflec-	Absorp-	Trans-	Diffu-	sity	Expan-	
	tivity		sivity	tivity	tivity	missiv.	sivity		sion	
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Aluminum alloys: (continued)										
Al + Mn + ΣX <sub>6</sub> , Al 3004	1	912	-	-	-	-	-	-	-	-
Al + Mn + ΣX <sub>6</sub> , Alcoa 3S	1	912	-	-	-	-	-	-	-	12 1034 1036
Al + Mn + ΣX <sub>6</sub> , Alcoa 4S	1	912	-	-	-	-	-	-	-	-
Al + Ni + ΣX <sub>6</sub>	1	914	-	-	-	-	-	-	-	12 1038
Al + Ni + ΣX <sub>6</sub> , RAE 40C	1	915	-	-	-	-	-	-	-	12 1040
Al + Ni + ΣX <sub>6</sub> , RAE 47B	1	915	-	-	-	-	-	-	-	12 1040
Al + Ni + ΣX <sub>6</sub> , RAE 47D	1	915	-	-	-	-	-	-	-	12 1040
Al + Ni + ΣX <sub>6</sub> , RAE 55	1	915	-	-	-	-	-	-	-	12 1040
Al + Si + ΣX <sub>6</sub>	1	917	-	-	-	-	-	10 277	-	12 1042
Al + Si + ΣX <sub>6</sub> , Al 132	1	919	-	-	-	-	-	-	-	-
Al + Si + ΣX <sub>6</sub> , Al 356	-	-	-	-	-	-	-	-	-	12 1044
Al + Si + ΣX <sub>6</sub> , Al 4032	-	-	-	-	-	-	-	-	-	12 1042 1044
Al + Si + ΣX <sub>6</sub> , Al 6151	-	-	-	-	-	-	-	-	-	12 1042 1044
Al + Si + ΣX <sub>6</sub> , Alpax gamma	1	918	-	-	-	-	-	-	-	12 1046
Al + Si + ΣX <sub>6</sub> , K. S. alloy 245	1	920	-	-	-	-	-	-	-	-
Al + Si + ΣX <sub>6</sub> , K. S. alloy 280	1	920	-	-	-	-	-	-	-	-
Al + Si + ΣX <sub>6</sub> , Lo-ex	1	919	-	-	-	-	-	-	-	12 1046
Al + Si + ΣX <sub>6</sub> , RR 50	1	918 919 920	-	-	-	-	-	-	-	12 1046
Al + Si + ΣX <sub>6</sub> , RR 53C	1	918	-	-	-	-	-	-	-	12 1046
Al + Si + ΣX <sub>6</sub> , SA1	1	918 919	-	-	-	-	-	-	-	12 1046
Al + Si + ΣX <sub>6</sub> , SA14	-	-	-	-	-	-	-	-	-	12 1046
Al + Si + ΣX <sub>6</sub> , SA44	1	918 919	-	-	-	-	-	-	-	-
Al + Si + ΣX <sub>6</sub> , Tens-50	-	-	-	-	-	-	-	-	-	12 1044
Al + Si + ΣX <sub>6</sub> , γ-Silumin modified	1	920	-	-	-	-	-	-	-	-
Al + Zn + ΣX <sub>6</sub>	1	922	4 514	7 1116 1118 1121 1124	7 1128	7 1131	-	10 234	-	12 1051
Al + Zn + ΣX <sub>6</sub> , Al 7039	-	-	-	-	-	-	-	-	-	12 1051 1053
Al + Zn + ΣX <sub>6</sub> , Al 7075	1	923	4 514	7 1122	-	-	-	-	-	12 1051 1053
Al + Zn + ΣX <sub>6</sub> , Al 7075, anodized	-	-	-	9 1256	9 1258	-	-	-	-	-
Al + Zn + ΣX <sub>6</sub> , Al 7075-T	-	-	-	7 1119	7 1129	7 1132	-	-	-	-
Al + Zn + ΣX <sub>6</sub> , Al 7075-T6	-	-	-	7 1126	-	-	-	-	-	12 1053
Al + Zn + ΣX <sub>6</sub> , Al 7075-T73	-	-	-	-	-	-	-	-	-	12 1053
Al + Zn + ΣX <sub>6</sub> , Al 7079	-	-	-	-	-	-	-	-	-	12 1051
Al + Zn + ΣX <sub>6</sub> , Al 7079-T6	-	-	-	-	-	-	-	-	-	12 1053
Al + Zn + ΣX <sub>6</sub> , Alclad 75S T	-	-	-	7 1116 1119	7 1129	-	-	-	-	-

Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion		
				Emissivity		Reflectivity		Absorptivity		Transmissiv.								
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Aluminum alloys: (continued)																		
Al + Zn + ΣX <sub>i</sub> , Alclad 7075T	-	-	-	-	7	1116 1119	7	1129	-	-	-	-	-	-	-	-	-	-
Al + Zn + ΣX <sub>i</sub> , Alcoa 75S	1	923	4	514	-	-	-	-	-	-	-	-	-	-	-	-	12	1051 1053
Al + Zn + ΣX <sub>i</sub> , Alcoa 75S T	-	-	-	-	7	1119	7	1129	7	1132	-	-	-	-	-	-	-	-
Al + Zn + ΣX <sub>i</sub> , Alcoa 75S T6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1053
Al + Zn + ΣX <sub>i</sub> , anodized	-	-	-	-	9	1256	9	1258	-	-	-	-	-	-	-	-	-	-
Al + Zn + ΣX <sub>i</sub> , British, L-5	1	923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al + Zn + ΣX <sub>i</sub> , L5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1053
Al + Zn + ΣX <sub>i</sub> , RR 77	1	923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1053
Al + Fe + Si + ΣX <sub>i</sub> , Al 1075, anodized	-	-	-	-	-	-	9	1243	-	-	-	-	-	-	-	-	-	-
Al + Fe + Si + ΣX <sub>i</sub> , Al 1145, anodized	-	-	-	-	-	-	9	1251	9	1253	-	-	-	-	-	-	-	-
Aluminum antimonide, AlSb	-	-	5	297	-	-	8	1352	-	-	-	-	-	-	-	-	-	-
Aluminum-antimony intermetallic compound, AlSb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	414
Aluminum boride, AlB <sub>2</sub>	-	-	-	-	8	732	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum borosilicate complex, natural	2	855	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum carbide + ΣX <sub>i</sub> , mixture	-	-	5	395	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum-copper intermetallic compounds:																		
AlCu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	417 419
AlCu <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	417 420
AlCu <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	417 422
Al <sub>2</sub> Cu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	417 418
Al <sub>4</sub> Cu <sub>9</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	417 421
Aluminum fluosilicate, 2AlF <sub>3</sub> ·SiO <sub>2</sub> , Brazil topaz	2	251	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum foil	-	-	-	-	7	5 6 9	7	26 27 40	7	43 50 55	7	60	-	-	-	-	-	-
Aluminum foil, Reynolds wrap	-	-	-	-	-	-	7	40	7	55	-	-	-	-	-	-	-	-
Aluminum-gold intermetallic compound, Al <sub>2</sub> Au	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	423
Aluminum-iron intermetallic compounds:																		
AlFe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	433 435 436
AlFe <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	434 435 437
Al <sub>3</sub> Fe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	428 429 432
Al <sub>9</sub> Fe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	427 429 431



Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emissivity		Reflectivity		Absorptivity		Transmissiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Aluminum oxide + aluminum, cermet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1306
Aluminum oxide + aluminum silicate, mixture	2	321	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum oxide + chromium, cermet	2	707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum oxide + chromium + SiC, cermet	-	-	-	-	8	1355	-	-	-	-	-	-	-	-	-	-	13	1309
Aluminum oxide + chromium oxide, mixture	2	324	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum oxide + chromium oxide powder	-	-	-	-	8	554	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum oxide + magnesium oxide, mixture	-	-	-	-	-	-	-	-	-	-	-	10	429	-	-	-	-	-
Aluminum oxide + manganese oxide, mixture	2	327 397	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum oxide + molybdenum, cermet	-	-	-	-	-	-	-	-	-	-	-	10	566	-	-	-	-	-
Aluminum oxide + nickel aluminum alloy, cermet	-	-	-	-	8	1358 1359	8	1363	-	-	-	-	-	-	-	-	-	-
Aluminum oxide + nickel oxide powder	-	-	-	-	8	556	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum oxide + silicon dioxide, mixture	2	328 402	-	-	-	-	-	-	-	-	-	10	426	-	-	-	-	-
Aluminum oxide + silicon dioxide + SiC, mixture	2	453 487	5	1546	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum oxide + silicon oxide powder, mixture	-	-	-	-	8	558	8	560	-	-	-	10	431	-	-	-	-	-
Aluminum oxide + titanium dioxide + SiC, mixture	2	456	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum oxide + tungsten + SiC, cermet	-	-	-	-	8	1375	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum oxide + zirconium dioxide, mixture	2	331 441	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum + oxygen, mixture	-	-	-	-	-	-	-	-	-	-	-	10	225	-	-	-	-	-
Aluminum phosphate, AlPO <sub>4</sub>	-	-	-	-	-	-	8	602	-	-	-	-	-	-	-	-	13	689
Aluminum phosphide, AlP	-	-	5	517	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum silicate + aluminum oxide, mixture	2	1090	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum silicates:	-	-	-	-	-	-	8	618	-	-	-	-	-	-	-	-	-	-
Al <sub>2</sub> SiO <sub>5</sub>	-	-	5	1289	-	-	-	-	-	-	-	-	-	-	-	-	13	703
Al <sub>2</sub> Si <sub>2</sub> O <sub>7</sub> ·2H <sub>2</sub> O	-	-	5	1295	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al <sub>4</sub> SiO <sub>9</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	703
Al <sub>6</sub> Si <sub>2</sub> O <sub>13</sub>	2	254	5	1292	-	-	-	-	-	-	-	10	412	-	-	-	13	703
Aluminum-silver intermetallic compound, AlAg <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	444
Aluminum sulfates:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>	-	-	5	1161	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> ·6H <sub>2</sub> O	-	-	5	1164	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum + tantalum aluminide powder	-	-	-	-	-	-	8	1431	-	-	-	-	-	-	-	-	-	-
Aluminum titanium oxide, Al <sub>2</sub> O <sub>3</sub> ·TiO <sub>2</sub>	-	-	5	1298	-	-	-	-	-	-	-	-	-	-	-	-	12	548
Aluminum trifluoride, AlF <sub>3</sub>	-	-	5	915	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminum tungsten oxide, 2Al <sub>2</sub> O <sub>3</sub> ·5WO <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	576

Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion		
			Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.					
V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Aluminum-uranium intermetallic compound, Al <sub>3</sub> U	-	-	-	-	-	-	-	-	-	12	447
Alundum	2	456	-	-	-	-	-	-	-	-	-
Amalgam	1	216	-	-	-	-	-	-	-	-	-
Amber, glass	2	924	-	-	-	-	-	-	-	-	-
Aminobenzene	-	6s 1	-	-	-	-	-	-	-	-	-
Aminomethane	-	6s 59	-	-	-	-	-	-	-	-	-
1-Amino-2-nitrobenzene	-	6s 69	-	-	-	-	-	-	-	-	-
1-Amino-3-nitrobenzene	-	6s 69	-	-	-	-	-	-	-	-	-
1-Amino-4-nitrobenzene	-	6s 69	-	-	-	-	-	-	-	-	-
2-Aminopropane	-	6s 57	-	-	-	-	-	-	-	-	-
Ammonia, NH <sub>3</sub>	3	95 6 61	-	-	-	-	-	-	11	68	-
Ammonia, trideuterated	-	6s 1	-	-	-	-	-	-	-	-	-
Ammonia-argon, mixture	-	-	-	-	-	-	-	-	11	342	-
Ammonia-carbon monoxide, mixture	3	444	-	-	-	-	-	-	-	-	-
Ammonia chloride, NH <sub>4</sub> Cl	-	-	-	-	-	-	-	-	-	13	968
Ammonia-ethylene, mixture	3	446	-	-	-	-	-	-	11	514	-
Ammonia-hydrogen, mixture	3	448	-	-	-	-	-	-	11	516	-
Ammonia-hydrogen-nitrogen, mixture	3	500	-	-	-	-	-	-	-	-	-
Ammonia-methane, mixture	-	-	-	-	-	-	-	-	11	526	-
Ammonia-methylamine, mixture	-	-	-	-	-	-	-	-	11	540	-
Ammonia nitrate, NH <sub>4</sub> NO <sub>3</sub>	-	-	-	-	-	-	-	-	-	13	671
Ammonia-nitrogen, mixture	3	451	-	-	-	-	-	-	11	531	-
Ammonia-nitrous oxide, mixture	-	-	-	-	-	-	-	-	11	534	-
Ammonia-oxygen, mixture	-	-	-	-	-	-	-	-	11	538	-
Ammonium aluminum sulfates:											
NH <sub>4</sub> Al(SO <sub>4</sub> ) <sub>2</sub>	-	5 1170	-	-	-	-	-	-	-	-	-
NH <sub>4</sub> Al(SO <sub>4</sub> ) <sub>2</sub> ·12H <sub>2</sub> O	-	5 1173	-	-	-	-	-	-	-	-	-
Ammonium dihydrogen arsenate, NH <sub>4</sub> H <sub>2</sub> AsO <sub>4</sub>	-	-	-	-	-	-	8 604	-	-	13	616
Ammonium dihydrogen phosphate, NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub>	2	679	-	-	-	-	-	-	-	13	689
Ammonium hydrogen sulfate, NH <sub>4</sub> HSO <sub>4</sub>	2	687	-	-	-	-	-	-	-	-	-
Ammonium perchlorate, NH <sub>4</sub> ClO <sub>4</sub>	2	757	-	-	-	-	-	-	-	-	-
Ammonium sulfate, (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	-	5 1167	-	-	-	-	-	-	-	-	-
Amyl alcohol	-	6s 72	-	-	-	-	-	-	-	-	-
<i>pr</i> i-Amyl alcohol	-	6s 72	-	-	-	-	-	-	-	-	-
<i>sec</i> -Amyl alcohol	-	6s 72	-	-	-	-	-	-	-	-	-
<i>tert</i> -Amyl alcohol	-	6s 61	-	-	-	-	-	-	-	-	-
Amyl carbinol	-	6s 44	-	-	-	-	-	-	-	-	-
Amyldimethylmethane	-	6s 63	-	-	-	-	-	-	-	-	-
α-Amylene	-	6s 73	-	-	-	-	-	-	-	-	-
β-Amylene	-	6s 73	-	-	-	-	-	-	-	-	-
Amylene hydrate	-	6s 61	-	-	-	-	-	-	-	-	-
Anatase	-	-	-	8 464	-	-	-	-	-	13	395



[illegible]

Substance Name	Thermal	Specif.	Thermal Radiative Properties				Thermal	Visco-	Thermal							
	Conduc-		Heat	Emissivity		Reflectivity				Absorp-	Trans-	Diffu-	sity	Expan-		
	tivity															
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Argon-carbon dioxide, mixture	3	297	-	-	-	-	-	-	-	-	-	11	285	-	-	
Argon-carbon dioxide-hellum, mixture	-	-	-	-	-	-	-	-	-	-	-	11	581	-	-	
Argon-carbon dioxide-hellum-methane, mixture	-	-	-	-	-	-	-	-	-	-	-	11	594	-	-	
Argon-carbon dioxide-methane, mixture	-	-	-	-	-	-	-	-	-	-	-	11	583	-	-	
Argon-deuterium, mixture	3	299	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-deuterium-hydrogen-nitrogen, mixture	3	507	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-deuterium-hydrogen-xenon, mixture	3	510	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-deuterium-krypton, mixture	3	488	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-deuterium-krypton-xenon, mixture	3	506	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-deuterium-neon, mixture	3	490	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-dimethyl ether, mixture	3	454	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-dimethyl ether-propane, mixture	3	499	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-hellum, mixture	3	251	-	-	-	-	-	-	-	-	-	11	237	-	-	
Argon-hellum-krypton, mixture	3	481	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-hellum-methane, mixture	-	-	-	-	-	-	-	-	-	-	-	11	582	-	-	
Argon-hellum-neon, mixture	-	-	-	-	-	-	-	-	-	-	-	11	580	-	-	
Argon-hellum-nitrogen, mixture	3	486	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-hellum-xenon, mixture	3	479	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-hydrogen, mixture	3	301	-	-	-	-	-	-	-	-	-	11	289	-	-	
Argon-hydrogen-krypton, mixture	3	496	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-hydrogen-krypton-xenon, mixture	3	505	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-hydrogen-neon-nitrogen, mixture	3	509	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-hydrogen-nitrogen, mixture	3	493	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-hydrogen-nitrogen-oxygen, mixture	3	508	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-krypton, mixture	3	263	-	-	-	-	-	-	-	-	-	11	249	-	-	
Argon-krypton-neon, mixture	3	478	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-krypton-neon-xenon, mixture	3	504	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-krypton-xenon, mixture	3	483	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-methane, mixture	3	304	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-methane-oxygen, mixture	3	485	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-methanol, mixture	3	458	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-neon, mixture	3	258	-	-	-	-	-	-	-	-	-	11	251	-	-	
Argon-nitrogen, mixture	3	306	-	-	-	-	-	-	-	-	-	11	294	-	-	
Argon-oxygen, mixture	3	311	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-propane, mixture	3	316	-	-	-	-	-	-	-	-	-	-	-	-	-	
Argon-sulfur dioxide, mixture	-	-	-	-	-	-	-	-	-	-	-	11	348	-	-	
Argon-xenon, mixture	3	267	-	-	-	-	-	-	-	-	-	11	258	-	-	
Armco, nonmetallic laminate	2	1032	-	-	-	-	-	-	-	-	-	-	-	-	-	
Armco 21-6-9	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1148	
Armco Iron	1	157 158 159 160 161 163	4	102	7	303 308	7	322	7	332	-	10	84 95	-	12	160 163 164

Substance Name	Thermal Conduc-tivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffu-sivity		Visco-sity		Thermal Expan-sion	
					Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Armco Iron, oxidized	-	-	-	-	9	1297	9	1299	-	-	-	-	-	-	-	-	-	-
Aromatic polyamide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1393
Arsenic, As	1	15	4	9	-	-	8	3	-	-	-	-	10	9	-	-	13	7
Arsenic hydride	-	-	6s	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic iodide	-	-	5	488	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic oxides:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
As <sub>2</sub> O <sub>3</sub>	-	-	5	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-
As <sub>2</sub> O <sub>5</sub>	-	-	5	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic selenide, As <sub>2</sub> Se <sub>3</sub>	-	-	-	-	-	-	8	1130	-	-	8	1133	-	-	-	-	13	1192
Arsenic sulfides:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AsS	-	-	5	638	-	-	-	-	-	-	-	-	-	-	-	-	-	-
As <sub>2</sub> S <sub>3</sub>	-	-	5	641	-	-	8	1177	-	-	8	1179	-	-	-	-	-	-
Arsenic telluride, As <sub>2</sub> Te <sub>3</sub>	1	1244	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic trideuteride, AsD <sub>3</sub>	-	-	6s	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic triiodide, AsI <sub>3</sub>	-	-	5	488	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsine	-	-	6s	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsine, trideuterated	-	-	6s	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos cement board	2	1107	-	-	-	-	-	-	-	-	-	-	10	568	-	-	-	-
Asbestos fiber	2	1135	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ash	2	1059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ash, volcanic	2	856	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ashes + dolomite + quartz sand, mixture	-	-	-	-	-	-	-	-	-	-	-	-	10	433	-	-	-	-
ASTM B80 HZ-32A, magnesium alloy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1208 1212
ASTM B80 ZH-62A, magnesium alloy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1213
ASTM B90 HM-21A, magnesium alloy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1212
ASTM B265-58T, grade 3 and 4, titanium alloy	-	-	4	257	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ASTM B265-58T, grade 6, titanium alloy	1	1074	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ASTM B265-58T, grade 7, titanium alloy	1	850	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ASTM B301-58T, copper alloy	1	582	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Astrolite, nonmetallic laminate	2	1029 1030 1052	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aurum	1	132	4	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Azurite, carbonate mineral	-	-	-	-	-	-	-	-	-	-	8	1658	-	-	-	-	-	-
Baddeleyite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	45
Bakelite	-	-	-	-	-	-	8	1742	8	1744	8	1746	-	-	-	-	13	151
Balsa	2	1060	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Balsa, hard pseudo	2	972 981	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Balsa, waterproofed	2	1060	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Balsa, x-ray protective pseudo	2	981	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Banana	-	-	-	-	-	-	-	-	-	-	-	-	10	624	-	-	-	-
Barite	-	-	-	-	-	-	-	-	-	-	8	1702	-	-	-	-	-	-







Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion		
				Emissivity		Reflectivity		Absorptivity		Transmissiv.								
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Beryllium oxides: (continued)																		
Grade I	2	128	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grade II	2	128	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grade, UOX	2	124 127 128 129	5	45	-	-	-	-	-	-	-	10	386	-	-	-	-	-
Norton's BeO	2	127	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Porcelain	2	124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Refractory grade, 3308-13-3	2	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triangle beryllia	2	126	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium oxide + aluminum oxide + $\Sigma X_4$ , mixture	2	461	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium oxide + beryllium, cermet	2 1	708 1416	5	1243 1246	-	-	-	-	-	-	-	-	-	-	-	-	13	1313
Beryllium oxide + beryllium + molybdenum, cermet	2	711	5	1249	-	-	-	-	-	-	-	-	-	-	-	-	13	1341
Beryllium oxide + beryllium + silicon, cermet	2	714	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1341
Beryllium oxide + beryllium tantalum compound, cermet	-	-	-	-	8	1377 1378	8	1382	-	-	-	-	-	-	-	-	-	-
Beryllium oxide + magnesium oxide, mixture	2	371	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium oxide + magnesium oxide + $\Sigma X_4$ , mixture	2	464	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium oxide + molybdenum, cermet	-	-	5	1252	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium oxide + molybdenum beryllide, cermet	-	-	5	1255	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium oxide + niobium beryllide, cermet	-	-	5	1258	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium oxide + tantalum beryllide, cermet	-	-	5	1261	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium oxide + thorium dioxide + $\Sigma X_4$ , mixture	2	467	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium oxide + titanium beryllide, cermet	-	-	5	1264	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium oxide + uranium dioxide, mixture	2	347	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium oxide + zirconium beryllide, cermet	-	-	5	1267	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium oxide + zirconium dioxide + $\Sigma X_4$ , mixture	2	470	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium-rhenium intermetallic compound, $Be_2Re$	-	-	-	-	8	1275	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium-scandium intermetallic compound, $Be_{13}Sc$	-	-	-	-	8	1275	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium silicate, $Be_2SiO_4$	-	-	5	1329	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium sulfate, $BeSO_4$	-	-	5	1179	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium-tantalum intermetallic compounds:																		
$Be_{13}Ta$	1	1251	-	-	8	1273 1277	8	1280	-	-	-	-	-	-	-	-	12	467 469 470





Substance Name	Thermal	Specif.	Thermal Radiative Properties								Thermal	Visco-	Thermal	
	Conduc-	Heat	Emis-		Reflec-		Absorp-		Trans-		Diffu-	sity	Expan-	
	tivity		sivity		tivity		tivity		missiv.	sivity		sion		
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Binder, alkyd pigmented with: (continued)														
Titanium dioxide + calcium sulfate	-	-	-	-	9	289	-	-	-	-	-	-	-	-
Titanox AMO	-	-	-	-	9	222	-	-	-	-	-	-	-	-
Zinc sulfide + clay	-	-	-	-	-	-	9	416	-	-	-	-	-	-
Binder, alkyd-melamine pigmented with:														
Aluminum oxide	-	-	-	-	9	33	-	-	-	-	-	-	-	-
CaSO <sub>4</sub> + TiO <sub>2</sub>	-	-	-	-	9	78	-	-	-	-	-	-	-	-
Lead carbonate	-	-	-	-	9	139	-	-	-	-	-	-	-	-
Magnesium oxide	-	-	-	-	9	161	-	-	-	-	-	-	-	-
Titanium dioxide	-	-	-	-	9	221	-	-	-	-	-	-	-	-
Titanox C-50	-	-	-	-	9	78 289	-	-	-	-	-	-	-	-
Titanox RC	-	-	-	-	9	78 289	-	-	-	-	-	-	-	-
Binder, aluminum phosphate pigmented with:														
Barium titanate	-	-	-	-	9	63	-	-	-	-	-	-	-	-
Calcium titanate	-	-	-	-	9	79 80	-	-	-	-	-	-	-	-
Cr-Co-Ni spinel	-	-	-	-	9	186	-	-	-	-	-	-	-	-
FCE-11	-	-	-	-	9	63	-	-	-	-	-	-	-	-
Iron titanate	-	-	-	-	3	123	-	-	-	-	-	-	-	-
Iron titanate + alumina	-	-	-	-	9	123	-	-	-	-	-	-	-	-
NiO-Cr <sub>2</sub> O <sub>3</sub> spinel + SiO <sub>2</sub>	-	-	-	-	9	186	-	-	-	-	-	-	-	-
Silicon carbide	-	-	-	-	9	174	-	-	-	-	-	-	-	-
SiC + SiO <sub>2</sub>	-	-	-	-	9	174	-	-	-	-	-	-	-	-
Strontium titanate	-	-	-	-	9	197	-	-	-	-	-	-	-	-
Tin oxide	-	-	-	-	9	201	-	9	205	-	-	-	-	-
Ultrox, ZrSiO <sub>4</sub>	-	-	-	-	-	-	-	9	435	-	-	-	-	-
Zirconium oxide	-	-	-	-	-	9	425	-	-	-	-	-	-	-
Zirconium silicate	-	-	-	-	-	-	-	9	435	-	-	-	-	-
Binder, barium beryllium silicate with cerium dioxide pigment	-	-	-	-	9	445 448	-	-	-	-	-	-	-	-
Binder, barium borosilicate frit with chromium oxide pigment	-	-	-	-	9	455 459	-	-	-	-	-	-	-	-
Binder, base glaze No. 1 pigmented with:														
Cerium dioxide	-	-	-	-	9	445	-	-	-	-	-	-	-	-
Chromium oxide + cobalt oxide	-	-	-	-	9	455	-	-	-	-	-	-	-	-
Cobalt oxide + chromium oxide	-	-	-	-	9	464	-	-	-	-	-	-	-	-
Binder, base glaze no. 2 pigmented with:														
Chromium oxide + cobalt oxide	-	-	-	-	9	456	-	-	-	-	-	-	-	-
Cobalt oxide + chromium oxide	-	-	-	-	9	464	-	-	-	-	-	-	-	-
Cobalt oxide + manganese oxide	-	-	-	-	9	464	-	-	-	-	-	-	-	-
Manganese oxide + cobalt oxide	-	-	-	-	9	468	-	-	-	-	-	-	-	-



Substance Name	Thermal	Specif.	Thermal Radiative Properties								Thermal	Visco-	Thermal	
	Conduc-	Heat	Emis-	Reflec-	Absorp-	Trans-	Thermal	Visco-	Thermal					
	tivity		sivity	tivity	tivity	missiv.	Diffu-	sity	Expan-					
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Binder, Du Pont RC-7007 pigmented with: (continued)														
Titanium dioxide	-	-	-	-	9	221	-	-	-	-	-	-	-	-
Titanox C-50	-	-	-	-	9	78 289	-	-	-	-	-	-	-	-
Titanox RC	-	-	-	-	9	78 289	-	-	-	-	-	-	-	-
Binder, Du Pont viton B with zinc oxide pigment	-	-	-	-	9	314	-	-	-	-	-	-	-	-
Binder, epoxide with titanium dioxide pigment	-	-	9	211	-	-	-	-	-	-	-	-	-	-
Binder, epoxy pigmented with:														
Carbon black	-	-	9	82 84	9	86	9	89	-	-	-	-	-	-
Lampblack	-	-	9	82 84	9	86	9	89	-	-	-	-	-	-
Titanium dioxide	-	-	9	211	-	9	252 255 263 281	-	-	-	-	-	-	-
Binder, ethylcellulose + Dow 7 pigmented with:														
Magnesium carbonate	-	-	-	-	9	156	-	-	-	-	-	-	-	-
Magnesium oxide	-	-	-	-	9	158	-	-	-	-	-	-	-	-
Binder, formaldehyde with lead carbonate pigment	-	-	-	-	9	138	-	-	-	-	-	-	-	-
Binder, G.E. RTV-602 silicone resin pigmented with:														
China clay	-	-	9	95	9	97	9	98 100	-	-	-	-	-	-
Rutile TiO <sub>2</sub> Du Pont R-960	-	-	-	-	9	228	9	273	-	-	-	-	-	-
Titanium oxide	-	-	-	-	9	220 244	9	256 263	-	-	-	-	-	-
Zinc oxide	-	-	-	-	9	314	9	373 392	-	-	-	-	-	-
Zinc oxide, S-13G	-	-	9	304	9	322 355	9	382 392	-	-	-	-	-	-
Zinc oxide, S-13H	-	-	-	-	9	323	-	-	-	-	-	-	-	-
Binder, G.E. SE 551 methyl-phenyl silicone with zinc oxide pigment	-	-	-	-	9	317	-	-	-	-	-	-	-	-
Binder, G.E. SR-122 with magnesium oxide pigment	-	-	-	-	-	9	163	-	-	-	-	-	-	-
Binder, gelatin with silver chloride pigment	-	-	-	-	9	181	-	9	183	-	-	-	-	-
Binder, lacquer with aluminum pigment	-	-	9	6	-	-	-	-	-	-	-	-	-	-
Binder, Ieonite 201-S pigmented with:														
Magnesium oxide	-	-	-	-	9	161	-	-	-	-	-	-	-	-
Zinc oxide	-	-	-	-	9	314	-	-	-	-	-	-	-	-
Zinc sulfide	-	-	-	-	9	406	-	-	-	-	-	-	-	-
Binder, LTV-602 with SP-500 zinc oxide pigment	-	-	-	-	9	322	-	-	-	-	-	-	-	-
Binder, LTV-602 with Ti pure R-900-1 pigment	-	-	-	-	9	220	-	-	-	-	-	-	-	-



Substance Name	Thermal Conduc-tivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffu-sivity		Visco-sity		Thermal Expan-sion	
					Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Binder, polyvinyl butyral pigmented with:																		
Titanium dioxide	-	-	-	-	-	-	-	-	9	267	-	-	-	-	-	-	-	-
Zinc sulfide	-	-	-	-	-	-	9	304	9	415	-	-	-	-	-	-	-	-
Binder, PS-7 potassium silicate pigmented with:																		
Alucer MC $Al_2O_3$	-	-	-	-	-	-	-	-	9	41	-	-	-	-	-	-	-	-
Aluminum oxide	-	-	-	-	9	28	9	33	9	41	-	-	-	-	-	-	-	-
										39	42							
$Al_2O_3 + TiO_2 + ZnO$	-	-	-	-	9	28	9	34	9	42	-	-	-	-	-	-	-	-
Aluminum phosphate	-	-	-	-	-	-	-	-	9	435	-	-	-	-	-	-	-	-
Aluminum silicate	-	-	-	-	-	-	9	47	9	49	-	-	-	-	-	-	-	-
Antimony oxide	-	-	-	-	-	-	9	51	9	54	-	-	-	-	-	-	-	-
										56								
										57								
										60								
Boron nitride	-	-	-	-	9	66	-	-	-	-	-	-	-	-	-	-	-	-
Cabot RF-1 $TiO_2$	-	-	-	-	9	214	-	-	-	-	-	-	-	-	-	-	-	-
Calcium metasilicate	-	-	-	-	-	-	9	76	-	-	-	-	-	-	-	-	-	-
Cr-Co-Ni spinel	-	-	-	-	-	-	-	-	9	187	-	-	-	-	-	-	-	-
Diatomaceous earth	-	-	-	-	-	-	9	113	9	116	-	-	-	-	-	-	-	-
Dicalite WB-5	-	-	-	-	-	-	9	113	9	179	-	-	-	-	-	-	-	-
E-P730 zinc oxide	-	-	-	-	-	-	9	316	-	-	-	-	-	-	-	-	-	-
Lanthanum oxide	-	-	-	-	-	-	9	127	9	132	-	-	-	-	-	-	-	-
Lithafrax	-	-	-	-	-	-	9	144	-	-	-	-	-	-	-	-	-	-
Lithium aluminum silicate	-	-	-	-	9	143	9	144	-	-	-	-	-	-	-	-	-	-
Magnesium aluminate spinel	-	-	-	-	-	-	-	-	9	187	-	-	-	-	-	-	-	-
Magnesium silicate	-	-	-	-	-	-	9	168	9	169	-	-	-	-	-	-	-	-
Molochite no. 6	-	-	-	-	-	-	9	47	9	49	-	-	-	-	-	-	-	-
Molochite SF	-	-	-	-	-	-	9	47	9	49	-	-	-	-	-	-	-	-
Silicon dioxide	-	-	-	-	-	-	9	178	9	179	-	-	-	-	-	-	-	-
SP-500 zinc oxide pigment	-	-	-	-	9	304	9	314	9	360	-	-	-	-	-	-	-	-
										365								
										370								
										394								
Strontium molybdate	-	-	-	-	9	188	9	191	9	194	-	-	-	-	-	-	-	-
Superpax $ZrSiO_4$ pigment	-	-	-	-	-	-	8	432	8	437	-	-	-	-	-	-	-	-
Tin oxide	-	-	-	-	9	201	9	204	9	205	-	-	-	-	-	-	-	-
										207								
Titanium dioxide	-	-	-	-	9	214	9	226	9	274	-	-	-	-	-	-	-	-
										281								
Titanium dioxide + aluminum oxide, mixture	-	-	-	-	-	-	9	285	-	-	-	-	-	-	-	-	-	-
										287								
XX254 $ZnO$ pigment	-	-	-	-	-	-	9	316	-	-	-	-	-	-	-	-	-	-
Zinc oxide	-	-	-	-	9	302	9	306	9	360	-	-	-	-	-	-	-	-
						304		314		362								
								355		365								
										373								
										392								
Zinc sulfide	-	-	-	-	-	-	9	405	9	418	-	-	-	-	-	-	-	-

Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.			
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Binder, PS-7 potassium silicate pigmented with: (continued)									
Zinc titanate	-	-	-	-	9 420	-	-	-	-
Zirconium oxide	-	-	-	9 425	9 428	-	-	-	-
Zirconium silicate	-	-	-	9 432	9 435 437 441	-	-	-	-
Binder, R-44 acrylic with strontium molybdate pigment	-	-	-	9 191	9 194	-	-	-	-
Binder, resin with leafing gold pigment	-	-	9 25	-	-	-	-	-	-
Binder, RTV-11 polymethyl siloxane with zinc oxide pigment	-	-	-	9 317	-	-	-	-	-
Binder, silica pigmented with:									
Silicon carbide	-	-	9 174	-	-	-	-	-	-
Titanium carbide	-	-	9 208	-	-	-	-	-	-
Zirconium oxide	-	-	-	9 425	-	-	-	-	-
Binder, silicate with tin oxide pigment	-	-	-	-	9 205 207	-	-	-	-
Binder, silicone-alkyd with zinc sulfide + clay pigment	-	-	-	-	9 416	-	-	-	-
Binder, silicone alkyd epoxide with titanium dioxide pigment	-	-	9 212	9 221 250	9 275	-	-	-	-
Binder, silicone pigmented with:									
Aluminum	-	-	9 3 6	9 13 17	9 21	-	-	-	-
Aluminum + carbon	-	-	-	-	9 24	-	-	-	-
Antimony oxide	-	-	-	9 51	-	-	-	-	-
Barium titanate	-	-	9 63	-	9 64	-	-	-	-
Boron nitride	-	-	-	9 68	-	-	-	-	-
Boron nitride + diatomaceous earth	-	-	-	9 70	-	-	-	-	-
Calcium carbonate	-	-	-	9 73	-	-	-	-	-
Carbon black	-	-	9 81 82	-	9 89	-	-	-	-
China clay	-	-	9 95	9 97	9 98 100	-	-	-	-
Clay + $TiO_2$	-	-	9 105	-	9 107	-	-	-	-
Diatomaceous earth	-	-	-	9 113	-	-	-	-	-
Iron oxide	-	-	9 117 119 121	-	-	-	-	-	-
Lampblack	-	-	9 82	9 86	-	-	-	-	-
Lead carbonate	-	-	-	9 138	-	-	-	-	-
Leafing aluminum	-	-	9 3 7	9 13 17	9 21	-	-	-	-
Leafing aluminum + carbon	-	-	-	-	9 24	-	-	-	-
Magnesium oxide	-	-	-	9 161	-	-	-	-	-
Magnesium oxide + diatomaceous earth	-	-	-	9 165	-	-	-	-	-
Micro-cell C, diatomaceous earth	-	-	-	9 113	-	-	-	-	-

Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties				Thermal Diffusivity		Viscosity		Thermal Expansion	
	V.	Page		Emissivity	Reflectivity	Absorptivity	Transmissiv.	V.	Page	V.	Page	V.	Page
Binder, silicone pigmented with: (continued)													
Silicon dioxide	-		-	9 178	-	-	-	-	-	-	-	-	-
SP-500 zinc oxide pigment	-		9 304	9 306 308 314	9 370 394	-	-	-	-	-	-	-	-
Strontium zirconate	-		9 198	-	9 199	-	-	-	-	-	-	-	-
Superlith XXXN pigment	-		-	8 405	8 415	-	-	-	-	-	-	-	-
Titanium oxide	-		9 211	9 220 244	9 252 255 263 281	-	-	-	-	-	-	-	-
Titanium oxide, Thermatrol ZA-100	-		-	9 224	-	-	-	-	-	-	-	-	-
Titanox A-WD, TiO <sub>2</sub>	-		-	9 222	-	-	-	-	-	-	-	-	-
Titanox AMO, anatase TiO <sub>2</sub>	-		-	9 222	-	-	-	-	-	-	-	-	-
Zinc oxide	-		9 302 304	9 308 314 355	9 362 371 392	-	-	-	-	-	-	-	-
Zinc oxide, B-1060	-		9 304	-	9 382 393	-	-	-	-	-	-	-	-
Zinc oxide, S-13	-		-	9 318 355	9 371 392	-	-	-	-	-	-	-	-
Zinc sulfide	-		9 401	9 404	9 412 415	-	-	-	-	-	-	-	-
Zirconium silicate	-		9 430	-	9 437	-	-	-	-	-	-	-	-
Binder, silicone ZW 40 with zinc sulfide pigment	-		9 401	-	9 415	-	-	-	-	-	-	-	-
Binder, silicone ZW 60 with zinc sulfide pigment	-		9 401	-	9 415	-	-	-	-	-	-	-	-
Binder, siloxane with titanium dioxide pigment	-		-	9 220	9 255 264	-	-	-	-	-	-	-	-
Binder, siloxane with zinc oxide pigment	-		-	9 316	9 362 392	-	-	-	-	-	-	-	-
Binder, sodium silicate pigmented with:													
Aqueblack, B	-		9 574	-	9 575	-	-	-	-	-	-	-	-
Calcium fluoride	-		-	-	9 75	-	-	-	-	-	-	-	-
Lithafrax	-		9 142	-	9 147 150	-	-	-	-	-	-	-	-
Lithium aluminum silicate	-		9 142	-	9 147 150	-	-	-	-	-	-	-	-
Lithium fluoride	-		-	-	9 155	-	-	-	-	-	-	-	-
Potassium aluminum silicate	-		-	-	9 171	-	-	-	-	-	-	-	-
Sodium aluminum silicate	-		-	-	9 185	-	-	-	-	-	-	-	-
Spodumene	-		-	-	9 150 153	-	-	-	-	-	-	-	-
Titanium dioxide	-		-	-	9 255	-	-	-	-	-	-	-	-
Zinc oxide	-		-	-	9 362	-	-	-	-	-	-	-	-
Zinc sulfide	-		-	-	9 412	-	-	-	-	-	-	-	-
Zirconium	-		9 26	-	-	-	-	-	-	-	-	-	-
Zirconium silicate	-		9 430	-	9 437	-	-	-	-	-	-	-	-





Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion		
				Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.								
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Bismuth alloys: (continued)																		
Bi + Pb + $\Sigma X$	1	938	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bi + Pb + $\Sigma X$ , Lipowitz alloy	1	939	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bi + Pb + $\Sigma X$ , Rose metal	1	939	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bi + Pb + $\Sigma X$ , Woods metal	1	939	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bismuth glance, $Bi_2Te_3$	-	5	717	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bismuth iodide, $BiI_3$	-	-	-	-	8	1027	-	-	-	-	-	-	-	-	-	-	-	-
Bismuth oxide, $Bi_2O_3$	-	5	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bismuth-platinum intermetallic compounds:																		
BiPt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	479 480 482
$Bi_3Pt$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	478 480 481
Bismuth selenide, $Bi_2Se_3$	-	-	-	-	8	1130	-	-	-	-	-	-	-	-	-	-	-	-
Bismuth selenide + bismuth telluride, mixture	1	1393	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bismuth stannate, $Bi_2(SnO_3)_2$	2	261	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bismuth sulfide, $Bi_2S_3$	-	5	647	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bismuth telluride, $Bi_2Te_3$	1	1257	5	717	-	8	1238	-	-	-	10	456	-	-	-	13	1270	
Bismuth tellurium selenide	-	-	-	-	8	1130	-	-	-	-	-	-	-	-	-	-	-	-
Bismuth telluride + tellurium, mixture	1	1415	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bismuth titanium oxide	-	-	-	-	-	-	-	-	8	644	-	-	-	-	-	-	-	-
Bisphenol-A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1405
Bitter spar, dolomite	2	810	5	1115	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bitumen	2	1155	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bitumin concrete	2	863	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bivinyll	-	6s	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Blanc fixe	-	-	-	-	-	-	-	-	-	-	10	413	-	-	-	-	-	-
Bone char	2	1156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boric acid + titanium boride, mixture	-	-	-	-	8	1468 1469	8	1471	-	-	-	-	-	-	-	-	-	-
Boric acid + titanium boride + titanium oxide, powder	-	-	-	-	8	1515 1516	8	1518	-	-	-	-	-	-	-	-	-	-
Boric oxide glass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1352
Boron, B	1	41	4	25	-	-	-	-	-	-	10	16	-	-	-	13	12	
Boron/Avco 5505, composite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1533
Boron carbide, $B_4C$	2	572	5	402	8	852	8	855	-	-	10	461	-	-	-	13	840	
Boron carbide + aluminum, cermet	2	717	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boron carbide + molybdenum oxide powders	-	-	-	-	-	-	8	1465	-	-	-	-	-	-	-	-	-	-
Boron carbide + sodium silicate, mixture	2	541	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boron fluoride oxide, trimeric	-	6s	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boron nitride, BN	2	656	5	1078	8	1037 1040 1042	8	1047	-	8	1054	-	-	-	-	13	1131	



[illegible]



Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion		
				Emissivity		Reflectivity		Absorptivity		Transmissiv.								
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Brick, shamoto	2	894 898	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, silica	2	408 489 492 502 894 896 897 898 900 902 904 906	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, silica fire	2	894 895 905	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, silica refractory	2	185	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, silicon carbide	2	895	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, silicious	2	492 902	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, sillimanite	2	902	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, Sil-O-Cel	2	896	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, slag	2	898	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, special, Sil-O-Cel	2	896	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, Star-brand	2	185	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, stillimanite refractory	2	902 903	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, super, Sil-O-Cel	2	896	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, tripolite	2	894	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, vermiculite	2	894	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, white shamoto	2	405	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brick, zirconia	2	535 895 905	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brimstone	2	89	5	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromic ether	-	6s	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromine	3	13	6	7	-	-	-	-	-	-	-	-	-	11	-	-	-	-
Bromine, monatomic	-	6s	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromine chloride	-	6s	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromine fluoride	-	6s	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromine iodide	-	6s	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromine pentafluoride	-	6s	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromobenzene	-	6s	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromobenzol	-	6s	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Bromobutane	-	6s	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	-	6s	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoethane	-	6s	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	-	6s	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dromomethane	-	6s	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Bromo-3-methylbutane	-	6s	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emissivity		Reflectivity		Absorptivity		Transmissiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Cadmium iodide, CdI <sub>2</sub>	-	-	5	491	-	-	-	-	-	-	-	-	-	-	-	-	13	1122
Cadmium-lithium intermetallic compound, CdLi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	487 489 490
Cadmium-magnesium intermetallic compound, Cd <sub>2</sub> Mg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	489 491
Cadmium oxide, CdO	-	-	5	54	8	216	-	-	-	-	-	-	-	-	-	-	13	205
Cadmium selenide, CdSe	-	-	-	-	-	-	8	1108	-	-	8	1110	-	-	-	-	13	1185
Cadmium sulfide, CdS	-	-	5	650	8	1181 1183	8	1188	-	-	8	1194	-	-	-	-	12	1221
Cadmium telluride, CdTe	1	2167	5	720	8	1239	8	1241	-	-	8	1244	-	-	-	-	13	1243
Cadmium telluride + mercury telluride, mixture	1	1408	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium tin arsenide, CdSnAs <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	752
Cadmium zirconium oxide, CdO·ZrO <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	602
Calcite	2	141	5	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcite	2	761	-	-	-	-	8	584 1653	-	-	8	586	-	-	-	-	-	-
Calcium, Ca	-	-	4	32	-	-	-	-	-	-	-	-	10	20	-	-	12	49
Calcium aluminum oxides:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CaO·Al <sub>2</sub> O <sub>3</sub>	-	-	5	1332	-	-	-	-	-	-	8	573	-	-	-	-	13	464
CaO·2Al <sub>2</sub> O <sub>3</sub>	-	-	5	1335	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CaO·6Al <sub>2</sub> O <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	468
3CaO·Al <sub>2</sub> O <sub>3</sub>	-	-	5	1338	-	-	-	-	-	-	-	-	-	-	-	-	13	469
3CaO·5Al <sub>2</sub> O <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	473
5CaO·3Al <sub>2</sub> O <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	474
12CaO·7Al <sub>2</sub> O <sub>3</sub>	-	-	5	1341	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium aluminum iron oxide, 4CaO·Al <sub>2</sub> O <sub>3</sub> ·Fe <sub>2</sub> O <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	509
Calcium aluminum silicates:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CaAl <sub>2</sub> Si <sub>2</sub> O <sub>8</sub>	-	-	5	1404	-	-	-	-	-	-	-	-	-	-	-	-	13	707
CaAl <sub>2</sub> Si <sub>2</sub> O <sub>8</sub> ·2H <sub>2</sub> O	-	-	5	1407	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ca <sub>2</sub> Al <sub>2</sub> SiO <sub>7</sub>	-	-	5	1401	-	-	-	-	-	-	-	-	-	-	-	-	13	727
Ca <sub>2</sub> Al <sub>4</sub> Si <sub>8</sub> O <sub>24</sub> ·7H <sub>2</sub> O	-	-	5	1410	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium borates:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CaB <sub>2</sub> O <sub>6</sub>	-	-	5	1344	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CaB <sub>4</sub> O <sub>7</sub>	-	-	5	1347	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ca <sub>2</sub> B <sub>2</sub> O <sub>5</sub>	-	-	5	1350	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ca <sub>2</sub> B <sub>2</sub> O <sub>6</sub>	-	-	5	1353	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium boride, CaB <sub>2</sub>	-	-	-	-	8	732	-	-	-	-	-	-	-	-	-	-	-	-
Calcium carbide, CaC <sub>2</sub>	-	-	5	405	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium carbonate, CaCO <sub>3</sub>	2	759	5	1112	-	-	-	-	-	-	-	-	-	-	-	-	13	637
Calcium chloride, CaCl <sub>2</sub>	-	-	5	794	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium feldspar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	707
Calcium fluoride, CaF <sub>2</sub>	2	630	5	924	8	921	8	924	8	929	8	931	-	-	-	-	13	1025



Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties								Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion	
			Emis- sivity		Reflec- tivity		Absorp- tivity		Trans- missiv.					
			V.	Page	V.	Page	V.	Page	V.	Page				
Calcium hafnium oxide, $\text{CaO} \cdot \text{HfO}_2$	-	-	-	-	-	-	-	-	-	-	-	-	13	501
Calcium iron oxides:														
$\text{CaC} \cdot \text{Fe}_2\text{O}_3$	-	5 1356	-	-	-	-	-	-	-	-	-	-	13	503
$2\text{CaO} \cdot \text{Fe}_2\text{O}_3$	-	5 1359	-	-	-	-	-	-	-	-	-	-	13	506
Calcium-lead intermetallic compounds	1 1271	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium magnesium carbonate, $\text{CaMg}(\text{CO}_3)_2$	-	5 1115	-	-	-	-	-	-	-	-	-	-	-	-
Calcium-magnesium intermetallic compound, $\text{CaMg}$	-	-	-	-	-	-	-	-	-	-	-	-	12	493
Calcium magnesium silicates:														
$\text{CaMgSiO}_4$	-	-	-	-	-	-	-	-	-	-	-	-	13	708
$\text{CaMgSi}_2\text{O}_6$	-	5 1413	-	-	-	-	-	-	-	-	-	-	13	708
$\text{Ca}_2\text{MgSi}_2\text{O}_7$	-	5 1416	-	-	-	-	-	-	-	-	-	-	13	708
$\text{Ca}_2\text{Mg}_8\text{Si}_6\text{O}_{28} \cdot \text{H}_2\text{O}$	-	5 1422	-	-	-	-	-	-	-	-	-	-	-	-
$\text{Ca}_3\text{MgSi}_2\text{O}_8$	-	5 1419	-	-	-	-	-	-	-	-	-	-	13	708
Calcium magnesium silicate, merwinite	-	-	-	-	-	-	-	-	-	-	-	-	13	708
Calcium magnesium silicate, monticellite	-	-	-	-	-	-	-	-	-	-	-	-	13	708
Calcium magnesium tungsten oxide, $2\text{CaO} \cdot \text{MgO} \cdot \text{WO}_3$	-	-	-	-	-	-	-	-	-	-	-	-	13	584
Calcium molybdenum oxide, $\text{CaO} \cdot \text{MoO}_3$	-	5 1362	-	-	-	-	-	-	-	-	-	-	13	517
Calcium oxide, $\text{CaO}$	2 141	5 57	-	-	8 218	-	-	-	8 220	-	-	-	13	208
Calcium oxide + magnesium oxide + $\Sigma\text{X}_i$ , mixture	2 477	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium oxide + silicon oxide, mixture	2 407	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium oxide + silicon oxide + $\Sigma\text{X}_i$ , mixture	2 501	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium oxide + uranium dioxide, mixture	2 426	-	-	-	-	-	-	-	-	10 438	-	-	-	-
Calcium oxide + zirconium oxide, mixture	2 442	-	-	-	-	-	-	-	-	10 450	-	-	-	-
Calcium oxide + zirconium oxide + $\Sigma\text{X}_i$ , mixture	2 531	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium phosphate + lithium carbonate + magnesium carbonate,	2 763	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium silicates:														
$\text{CaSiO}_3$	-	5 1365	-	-	-	-	-	-	-	-	-	-	13	705
$\text{Ca}_2\text{SiO}_4$	-	5 1368	-	-	8 618	-	-	-	-	-	-	-	13	705
$\text{Ca}_3\text{SiO}_5$	-	5 1371	-	-	-	-	-	-	-	-	-	-	13	705
$\text{Ca}_3\text{Si}_2\text{O}_7$	-	5 1374	-	-	-	-	-	-	-	-	-	-	13	705
Calcium stannate, $\text{CaSnO}_3$	2 264	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium stannide, $\text{Ca}_2\text{Sn}$	1 1273	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium sulfates:														
$\text{CaSO}_4$	-	5 1182	-	-	8 627	-	-	-	8 629	-	-	-	-	-
$\text{CaSO}_4 \cdot 1/2\text{H}_2\text{O}$	-	5 1185	-	-	-	-	-	-	-	-	-	-	-	-
$\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$	-	5 1188	-	-	-	-	-	-	-	-	-	-	-	-
Calcium sulfide, $\text{CaS}$	-	5 653	-	-	-	-	-	-	-	-	-	-	13	1238
Calcium-tin intermetallic compound, $\text{Ca}_2\text{Sn}$	1 1273	-	-	-	-	-	-	-	-	-	-	-	-	-

Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties				Thermal Diffusivity		Viscosity		Thermal Expansion		
				Emis-sivity	Reflec-tivity	Absorp-tivity	Trans-missiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Calcium titanium oxides:														
CaO-TiO <sub>2</sub>	2	267	5	1377	-	-	-	-	-	-	-	-	-	-
3CaO-2TiO <sub>2</sub>	-	-	5	1380	-	-	-	-	-	-	-	-	-	-
Calcium tungsten oxide, CaO-WO <sub>3</sub>	2	270	5	1383	-	-	-	8	663	10	415	-	13	580
Calcium uranium oxide, CaO-UO <sub>2</sub>	-	-	5	1386	-	-	-	-	-	-	-	-	-	-
Calcium vanadium oxides:														
CaO-V <sub>2</sub> O <sub>5</sub>	-	-	5	1389	-	-	-	-	-	-	-	-	-	-
2CaO-V <sub>2</sub> O <sub>5</sub>	-	-	5	1392	-	-	-	-	-	-	-	-	-	-
3CaO-V <sub>2</sub> O <sub>5</sub>	-	-	5	1395	-	-	-	-	-	-	-	-	-	-
Calcium zirconium oxide, CaO-ZrO <sub>2</sub>	-	-	5	1398	-	-	-	-	-	-	-	-	13	603
Calcium zirconium silicate, CaZrSiO <sub>4</sub>	-	-	-	-	-	-	8	616	-	-	-	-	-	-
Carbides, miscellaneous	-	-	-	-	8	847 849 851	8	854	-	-	-	-	-	-
Carbomethene	-	6s	57	-	-	-	-	-	-	-	-	-	-	-
Carbon	2	5	-	-	8	5 8 10 12 14 16	8	18 20 22 24 25	-	8	27	10	21	-
Carbon, atomic	-	6s	12	-	-	-	-	-	-	-	-	-	-	-
carbon, glassy C	-	-	-	-	-	-	-	-	-	-	-	-	13	16
Carbon, graphite	-	5	9	8	30 31 38 40 42 44 51 57	8	59 61 63 65 70 71	8	74 76	-	-	-	-	-
Carbon, graphitized	-	-	-	-	-	-	-	-	-	-	-	-	13	130
Carbon black, channel	2	764	-	-	-	-	-	-	-	-	-	-	-	-
Carbon black, graphitized	2	60	-	-	-	-	-	-	-	-	-	-	-	-
Carbon, diamond	-	5	4	-	-	-	-	-	-	-	-	-	-	-
Carbon dichloride	-	6s	90	-	-	-	-	-	-	-	-	-	-	-
Carbon dioxide, CO <sub>2</sub>	3	145	6	143	-	-	-	-	-	-	11	119	-	-
Carbon dioxide-carbon monoxide-hydrogen-methane-nitrogen, mixture	-	-	-	-	-	-	-	-	-	-	11	620	-	-
Carbon dioxide-carbon monoxide-hydrogen-methane-nitrogen-oxygen, mixture	-	-	-	-	-	-	-	-	-	-	11	621	-	-
Carbon dioxide-carbon monoxide-hydrogen-methane-nitrogen-oxygen-heavier hydrocarbons, mixture	-	-	-	-	-	-	-	-	-	-	11	622	-	-
Carbon dioxide-carbon monoxide-hydrogen-nitrogen-oxygen, mixture	-	-	-	-	-	-	-	-	-	-	11	623	-	-
Carbon dioxide-ethylene, mixture	3	389	-	-	-	-	-	-	-	-	-	-	-	-
Carbon dioxide-helium, mixture	3	322	-	-	-	-	-	-	-	-	11	297	-	-
Carbon dioxide-hydrogen, mixture	3	391	-	-	-	-	-	-	-	-	11	366	-	-
Carbon dioxide-hydrogen chloride, mixture	-	-	-	-	-	-	-	-	-	-	11	501	-	-

Substance Name	Thermal Conduc-tivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffu-sivity		Visco-sity		Thermal Expan-sion	
					Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Carbon dioxide-hydrogen-nitrogen-oxygen, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	595	-	-	
Carbon dioxide-hydrogen-oxygen, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	584	-	-	
Carbon dioxide-krypton, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	331	-	-	
Carbon dioxide-neon, mixture	3	385	-	-	-	-	-	-	-	-	-	-	-	11	334	-	-	
Carbon dioxide-methane, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	369	-	-	
Carbon dioxide-nitrogen, mixture	3	396	-	-	-	-	-	-	-	-	-	-	-	11	376	-	-	
Carbon dioxide-nitrogen-oxygen, mixture	3	497	-	-	-	-	-	-	-	-	-	-	-	11	585	-	-	
Carbon dioxide-nitrous oxide, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	383	-	-	
Carbon dioxide-oxygen, mixture	3	401	-	-	-	-	-	-	-	-	-	-	-	11	385	-	-	
Carbon dioxide-propane, mixture	3	403	-	-	-	-	-	-	-	-	-	-	-	11	387	-	-	
Carbon dioxide-steam, mixture	3	466	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Carbon dioxide-sulfur dioxide, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	503	-	-	
Carbon fluoride, CF <sub>4</sub>	-	6s	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Carbon monoxide, CO	3	151	6s	15	-	-	-	-	-	-	-	-	-	11	125	-	-	
			6	152														
Carbon monoxide-ethylene, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	389	-	-	
Carbon monoxide-hydrogen, mixture	3	405	-	-	-	-	-	-	-	-	-	-	-	11	391	-	-	
Carbon monoxide-nitrogen, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	393	-	-	
Carbon monoxide-oxygen, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	397	-	-	
Carbon nitride + uranium cerium, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1163	
Carbon oxychloride	-	6s	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Carbon oxyfluoride	-	6s	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Carbon-oxygen, mixture	2	764	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Carbon oxysulfide	-	6s	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Carbon resistor graphite	2	73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Carbon + silicon carbide, mixture	-	5	1276	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Carbon + silicon carbide + SiC, mixture	-	5	1279	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Carbon + silicon carbide + zirconium boride, mixture	-	-	-	-	-	-	-	-	-	-	-	10	538	-	-	-	-	
Carbon sulfides:																		
CS	-	6s	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CS <sub>2</sub>	-	6s	13	-	-	-	-	-	-	-	-	-	-	-	-	13	1239	
Carbon tetrabromide	-	6s	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Carbon tetrachloride	3	156	6	159	-	-	-	-	-	-	-	-	-	11	129	-	-	
Carbon tetrafluoride	-	-	-	-	-	-	-	-	-	-	-	-	-	11	131	-	-	
Carbon tetrachloride-dichloromethane, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	506	-	-	
Carbon tetrachloride-methane, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	401	-	-	
Carbon tetrachloride-methanol, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	510	-	-	
Carbon tetrachloride-octamethylcyclotetrasiloxane, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	399	-	-	



Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emissivity		Reflectivity		Absorptivity		Transmissivity							
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Ceramics: (continued)																		
Ceramag 2817	-		-		-		-		-		-		-		-		13	1284
Ceramag 7441	-		-		-		-		-		-		-		-		13	1284
Miscellaneous	2	915	-		-		-		-		-		-		-		13	1291
Cerium, Ce	1	50	4	36	-		-		-		-		10	43	-		12	53
Cerium alloys:																		
Ce + Mg	-		-		-		-		-		-		-		-		12	702
Ce + Th	-		-		-		-		-		-		-		-		12	702
Cerium arsenide, CeAs	-		-		-		-		-		-		-		-		13	752
Cerium boride, CeB <sub>6</sub>	-		-		8	722	-		-		-		-		-		-	
Cerium carbides:																		
CeC <sub>2</sub>	-		-		-		-		-		-		-		-		13	935
Ce <sub>2</sub> C <sub>3</sub>	-		-		-		-		-		-		-		-		13	935
Cerium oxides:																		
CeO <sub>2</sub>	2	144	5	60	8	225	8	227	-		-		-		-		13	212
Ce <sub>2</sub> O <sub>3</sub>	-		5	64	-		-		-		-		-		-		-	
Cerium sulfides:																		
CeS	-		5	656	-		-		-		-		-		-		13	1239
Ce <sub>2</sub> S <sub>3</sub>	-		5	659	8	1231	-		-		-		-		-		13	1239
Cerium trifluoride, CeF <sub>3</sub>	-		5	927	-		-		-		-		-		-		-	
Cerium-indium intermetallic compound, CeIn <sub>3</sub>	-		-		-		-		-		-		-		-		12	496 498 499
Cerium dioxide + magnesium oxide, mixture	2	350	-		-		-		-		-		-		-		-	
Cerium dioxide + uranium dioxide, mixture	2	353	-		-		-		-		-		-		-		-	
Cerium-palladium intermetallic compound, CePd <sub>3</sub>	-		-		-		-		-		-		-		-		12	497 498 500
Cerium-ruthenium intermetallic compound, CeRu <sub>2</sub>	-		-		-		-		-		-		-		-		12	501
Cerium-tin intermetallic compound, CeSn <sub>3</sub>	-		-		-		-		-		-		-		-		12	504
Cermets:																		
Al <sub>2</sub> O <sub>3</sub> + Al	-		-		-		-		-		-		-		-		13	1306
Al <sub>2</sub> O <sub>3</sub> + Cr	2	707	-		-		-		-		-		-		-		-	
	1	1419	-		-		-		-		-		-		-		-	
Al <sub>2</sub> O <sub>3</sub> + Mo	-		-		-		-		-		-		10	566	-		-	
Al <sub>2</sub> O <sub>3</sub> + NiAl	-		-		8	1358 1359	8	1363	-		-		-		-		-	
B <sub>2</sub> C + Al	2	717	-		-		-		-		-		-		-		-	
BeO + Be	2	708	5	1243	-		-		-		-		-		-		13	1313
	1	1416	-		-		-		-		-		-		-		-	
BeO + Be, QMV	-		5	1243	-		-		-		-		-		-		-	
BeO + Be, YB 9052	-		5	1243	-		-		-		-		-		-		-	
BeO + Be, YB 9054	-		5	1243	-		-		-		-		-		-		-	



Substance Name	Thermal	Specif.	Thermal Radiative Properties				Thermal	Visco-	Thermal
	Conduc-	Heat	Emis-	Reflec-	Absorp-	Trans-	Diffu-	sity	Expan-
	tivity		sivity	tivity	tivity	missiv.	sivity		sion
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Cermets: (continued)									
UO <sub>2</sub> + U	2 744 1 1442	-	-	-	-	-	-	-	-
UO <sub>2</sub> + Zr	2 746	-	-	-	-	-	-	-	13 1342
USi <sub>3</sub> + W	-	-	-	-	-	-	-	-	13 1342
ZrB <sub>2</sub> + Cr	-	-	-	-	-	-	-	-	13 1342
ZrH <sub>2</sub> + U	-	-	-	-	-	-	10 540	-	-
ZrO <sub>2</sub> + Al	-	-	-	8 1442	-	-	-	-	-
ZrO <sub>2</sub> + Ti	2 749	5 1285	-	-	-	-	-	-	13 1333
ZrO <sub>2</sub> + Zr	2 752 1 1444	-	-	-	-	-	-	-	13 1337
Al <sub>2</sub> O <sub>3</sub> + Cr + SiC	-	-	8 1355	-	-	-	-	-	13 1309
Al <sub>2</sub> O <sub>3</sub> + W + SiC	-	-	8 1375	-	-	-	-	-	-
BeO + Be + Mo	2 711	5 1249	-	-	-	-	-	-	13 1341
BeO + Be + Si	2 714	-	-	-	-	-	-	-	13 1341
NiO + NiAl + SiC	-	-	8 1393 1394	8 1398	-	-	-	-	-
TiC + Co + NbC	2 726	-	-	-	-	-	-	-	-
TiC + Ni + SiC	-	-	8 1412 1415	-	-	-	-	-	13 1319
TiC + Ni + NbC	2 730	-	-	-	-	-	-	-	-
ZrO <sub>2</sub> + Y <sub>2</sub> O <sub>3</sub> + Zr	2 753	-	-	-	-	-	-	-	-
TiC + Ni + Mo + NbC	2 727	-	-	-	-	-	-	-	-
Cesium, Cs	1 54	4 40	-	-	-	-	10 44	-	12 60
Cesium aluminum silicate, CsAlSi <sub>3</sub> O <sub>8</sub>	-	-	-	-	-	-	-	-	13 709
Cesium aluminum sulfate dodecahydrate, CsAl(SO <sub>4</sub> ) <sub>2</sub> ·12	-	5 1191	-	-	-	-	-	-	-
Cesium bromide, CsBr	2 565	-	-	8 737	-	8 739	-	-	13 801
Cesium chloride, CsCl	-	5 797	-	-	-	-	-	-	13 973
Cesium chloride + SiC, mixture	-	-	-	-	-	-	-	-	13 1015
Cesium fluoride, CsF	-	-	-	-	-	-	-	-	13 1076
Cesium hydrogen fluoride, CsHF <sub>2</sub>	-	5 931	-	-	-	-	-	-	-
Cesium iodide, CsI	2 561	5 494	-	8 995	-	8 997	-	-	13 1098
Cesium sulfate, Cs <sub>2</sub> SO <sub>4</sub>	-	-	-	-	-	-	-	-	13 730
Cetane	-	6s 43	-	-	-	-	-	-	-
Charcoal	2 1157	-	-	-	-	-	-	-	-
Charcoal, powder	2 1040	-	-	-	-	-	-	-	-
Chinone	-	6s 2	-	-	-	-	-	-	-
Chlorides, miscellaneous	-	-	-	8 905	-	8 907	-	-	-
Chlorinated hydrochloric ether	-	6s 27	-	-	-	-	-	-	-
Chlorine, Cl <sub>2</sub>	3 17	6 11	-	-	-	-	-	11 11	-
Chlorine, monatomic	-	6s 17	-	-	-	-	-	-	-
Chlorine cyanide	-	6s 24	-	-	-	-	-	-	-
Chlorine dioxide	-	6s 19	-	-	-	-	-	-	-





Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties				Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.			
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Chromium alloys: (continued)														
Cr + Mo	-		-		-		-		-		-		12	713
Cr + Ni	1	525	-		-		-		-		-		12	719
Cr + Ni, Vickers F. D. P.	-		-		7	1221	-		-		-		-	
Cr + Si	-		-		-		-		-		-		12	721
Cr + Sn	-		-		-		-		-		-		12	725
Cr + Ti	-		-		-		-		-		-		12	726
Cr + V	-		-		-		-		-		-		12	729
Cr + Al + $\Sigma X_i$	-		4	517	-		-		-		-		-	
Cr + Fe + $\Sigma X_i$	1	944	4	520	-		-		-		-		12	1060
Cr + Fe + $\Sigma X_i$ , aluminothermic chromium	-		4	520	-		-		-		-		-	
Cr + Fe + $\Sigma X_i$ , Russian, ferrochromium	1	945	4	520	-		-		-		-		-	
Cr + Si + $\Sigma X_i$	-		-		-		-		-		-		12	1064
Chromium + aluminum oxide, cermet	1	1419	-		-		-		-		-		-	
Chromium borides:														
CrB	-		5	335	-		8	734	-		-		13	796
CrB <sub>2</sub>	-		5	338	8	731	-		-		-		13	796
Cr <sub>2</sub> B	-		-		-		8	734	-		-		-	
Chromium carbides:														
Cr <sub>3</sub> C <sub>2</sub>	-		5	408	8	852	-		-		-		13	845
Cr <sub>4</sub> C	-		5	414	-		-		-		-		-	
Cr <sub>5</sub> C <sub>2</sub>	-		5	411	-		-		-		-		-	
Cr <sub>7</sub> C <sub>3</sub>	-		5	417	8	852	-		-		-		-	
Chromium chlorides:														
CrCl <sub>2</sub>	-		5	800	-		-		-		-		-	
CrCl <sub>3</sub>	-		5	803	-		-		-		-		-	
Chromium-iron intermetallic compound, CrFe	-		-		-		-		-		-		12	507
Chromium nitrides:														
CrN	-		-		8	1087	-		-		-		-	
Cr <sub>2</sub> N	-		-		8	1087	-		-		-		-	
Chromium oxides:														
CrO <sub>3</sub>	-		-		-		8	236	-		-		-	
Cr <sub>2</sub> O <sub>3</sub>	-		5	67	8	231 233	8	236	-		-		13	217
Chromium oxide + magnesium oxide + $\Sigma X_i$ , mixture	2	473 480	-		-		-		-		-		-	
Chromium oxide + titanium chromium compound, cermet	-		-		8	1385 1386	8	1390	-		-		-	
Chromium oxide + yttrium oxide powders	-		-		8	509 570	-		-		-		-	

Substance Name	Thermal Conduc-tivity		Specif. Heat		Thermal Radiative Properties				Thermal Diffu-sivity		Visco-sity		Thermal Expan-sion	
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Chromium silicides:														
CrSi	-		5	565	8	1140 1142	-	-	-	-	-	-	13	1211
CrSi <sub>2</sub>	-		5	568	8	1140 1142	-	-	-	-	-	-	13	1211
Cr <sub>3</sub> Si	-		5	559	8	1139 1140 1142	8	1144	-	-	-	-	13	1195
Cr <sub>3</sub> Si <sub>2</sub>	-		-	-	8	1140 1142	-	-	-	-	-	-	13	1211
Cr <sub>6</sub> Si <sub>5</sub>	-		5	562	-	-	-	-	-	-	-	-	-	-
Chromium telluride, CrTe	-		-	-	-	-	-	-	-	-	-	-	13	1248
Chromium tungsten oxide, Cr <sub>2</sub> O <sub>3</sub> ·WO <sub>3</sub>	-		-	-	-	-	-	-	-	-	-	-	13	586
Chromium vanadium oxide, Cr <sub>2</sub> O <sub>3</sub> ·V <sub>2</sub> O <sub>5</sub>	-		-	-	-	-	-	-	-	-	-	-	13	595
Cinnamene	-		6a	84	-	-	-	-	-	-	-	-	-	-
Clay	-		-	-	-	-	-	-	-	10	546	-	-	-
Clay, Ashkhabad	2	804 805	-	-	-	-	-	-	-	-	-	-	-	-
Clay, Beskhudnikov	2	804	-	-	-	-	-	-	-	-	-	-	-	-
Clay, chamotte	2	804	-	-	-	-	-	-	-	-	-	-	-	-
Clay, Dixie	-		-	-	-	-	-	-	-	10	546	-	-	-
Clay, fire	2	804	-	-	-	-	-	-	-	-	-	-	-	-
Clay, fire aluminous	2	489	-	-	-	-	-	-	-	-	-	-	-	-
Clay, fire light weight	2	403 404	-	-	-	-	-	-	-	-	-	-	-	-
Clay, fire pressed	2	403	-	-	-	-	-	-	-	-	-	-	-	-
Clay, Kuchin	2	804	-	-	-	-	-	-	-	-	-	-	-	-
Clay + magnesium oxide, mixture	2	374	-	-	-	-	-	-	-	-	-	-	-	-
Climax	1	1198 1213	-	-	-	-	-	-	-	-	-	-	-	-
Clinoenstatite	-		-	-	-	-	-	-	-	-	-	-	13	717
Coal, angron brown	2	808	-	-	-	-	-	-	-	-	-	-	-	-
Coal, brown	-		-	-	-	-	-	-	-	10	35	-	-	-
Coal, donets gas	2	808	-	-	-	-	-	-	-	-	-	-	-	-
Coal, donets anthracite	2	808	-	-	-	-	-	-	-	-	-	-	-	-
Coal, gas	-		-	-	-	-	-	-	-	10	22 35	-	-	-
Coal, tar fractions	2	1158	-	-	-	-	-	-	-	-	-	-	-	-
Coating, acrylic on:														
Aluminum substrate	-		-	-	9	1108	9	1110	-	-	-	-	-	-
Aluminum oxide substrate	-		-	-	9	1109	-	-	-	-	-	-	-	-
Coating, alkyd on aluminum substrate	-		-	-	-	-	9	1111	-	-	-	-	-	-
Coating, aluminum on:														
Aluminum substrate	-		-	-	9	580	9	592	9	610	-	-	-	-
Copper substrate	-		-	-	-	-	9	594	-	-	-	-	-	-
Epoxy substrate	-		-	-	-	-	9	602	9	610	-	-	-	-
Fabric substrate	-		-	-	9	586	-	-	-	-	-	-	-	-



Substance Name	Thermal	Specif.	Thermal Radiative Properties				Thermal	Visco-	Thermal
	Conduc-	Heat	Emiss-	Reflec-	Absorp-	Trans-	Diffu-	sity	Expan-
	tivity		sivity	tivity	tivity	missiv.	sivity		sion
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Coating, antimony on:									
Aluminum substrate	-	-	-	-	-	9 615	-	-	-
Glass substrate	-	-	-	9 614	-	-	-	-	-
Stillbene substrate	-	-	-	-	-	9 615	-	-	-
Sb + Cu	1 495	-	-	-	-	-	10 227	-	-
Coating, antimony black on:									
Cellulose nitrate substrate	-	-	-	-	-	9 1172	-	-	-
KRS-5 substrate	-	-	-	-	-	9 1172	-	-	-
Coatings, applied, nonmetallic	2 1009	-	-	-	-	-	-	-	-
Coating, bakelite lacquer on unknown substrate	-	-	9 1112	-	-	-	-	-	-
Coating, barium fluoride on zinc selenide substrate	-	-	-	9 810	-	9 812	-	-	-
Coating, barium + strontium on nickel substrate	-	-	9 616	-	-	-	-	-	-
Coating, barium titanate on:									
Aluminum substrate	-	-	9 815	-	9 818	-	-	-	-
Nb-1Zr substrate	-	-	9 815 817	-	-	-	-	-	-
Coating, bismuth oxide on glass substrate	-	-	-	9 820	-	9 823	-	-	-
Coating, black nickel on copper substrate	-	-	9 700	-	-	-	-	-	-
Coating, boron on Nb-1Zr substrate	-	-	9 826	-	-	-	-	-	-
Coating, boron carbide on:									
Inconel X substrate	-	-	9 829	9 832	-	-	-	-	-
Molybdenum substrate	-	-	9 827	-	-	-	-	-	-
Coating, butyl acrylate on anodized aluminum substrate	-	-	-	9 1114	-	-	-	-	-
Coating, butylated melamine formaldehyde on anodized aluminum substrate	-	-	-	9 1116	-	-	-	-	-
Coating, butylated urea formaldehyde on anodized aluminum substrate	-	-	-	9 1118	-	-	-	-	-
Coating, butylated urea formaldehyde on aluminum substrate	-	-	-	9 1118	-	-	-	-	-
Coating, cadmium arsenide on glass substrate	-	-	-	-	-	9 836	-	-	-
Coating, cadmium sulfide on aluminum and glass substrate	-	-	-	-	-	9 840	-	-	-
Coating, cadmium oxide on glass substrate	-	-	-	-	-	9 838	-	-	-
Coating, calcium on glass substrate	-	-	-	-	-	9 617	-	-	-
Coating, calcium titanate on:									
Aluminum substrate	-	-	9 845	-	9 850	-	-	-	-
Beryllium substrate	-	-	9 843	-	-	-	-	-	-
Niobium substrate	-	-	9 843 849	-	-	-	-	-	-
Nb-1Zr substrate	-	-	9 843	-	-	-	-	-	-
Stainless steel substrate	-	-	9 843	-	-	-	-	-	-



Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties				Thermal Diffusivity	Viscosity	Thermal Expansion		
	Emis-sivity			Reflec-tivity		Absorp-tivity	Trans-missiv.					
	V.	Page		V.	Page	V.	Page	V.	Page	V.	Page	V.
Coating, chromium oxide + silicon dioxide + $\Sigma$ Xt on: (continued)												
Titanium 6Al-4V substrate	-	-	9	881 883	-	-	-	-	-	-	-	-
Coating, cobalt on:												
Glass substrate	-	-	-	9	632	-	9	634	-	-	-	-
Platinum substrate	-	-	9	631	-	9	633	-	-	-	-	-
Stainless steel substrate	-	-	9	631	9	632	-	-	-	-	-	-
Coating, cobalt oxide on:												
Silver substrate	-	-	9	887	-	-	-	-	-	-	-	-
Tantalum substrate	-	-	9	887 888	-	-	-	-	-	-	-	-
Coating, cobalt + tungsten on inconel X substrate	-	-	9	636	9	639	-	-	-	-	-	-
Coating, copper on:												
Epoxy substrate	-	-	-	9	643	-	-	-	-	-	-	-
Glass substrate	-	-	-	9	642	-	9	644	-	-	-	-
Polyurethane substrate	-	-	-	9	643	-	-	-	-	-	-	-
Coating, copper oxide on:												
Nickel substrate	-	-	9	891	-	-	-	-	-	-	-	-
Silver substrate	-	-	9	891	-	-	-	-	-	-	-	-
Stainless steel substrate	-	-	9	890	-	-	-	-	-	-	-	-
Coating, copper + tin on:												
Glass substrate	-	-	-	9	645	-	-	-	-	-	-	-
Steel substrate	-	-	-	9	645	-	-	-	-	-	-	-
Coating, copper phosphorous selenide on fluorite substrate	-	-	-	9	892	-	9	893	-	-	-	-
Coating, copper sulfide black on copper substrate	-	-	9	894	-	-	-	-	-	-	-	-
Coating, Corning 7940 on silver substrate	-	-	9	1049	9	1054	9	1072	-	-	-	-
Coating, cymel 405 on quartz substrate	-	-	-	-	-	9	1130	-	-	-	-	-
Coating, diacetyl cellulose on varnish substrate	-	-	-	-	-	-	9	1119	-	-	-	-
Coating, Dow 7 on magnesium substrate	-	-	9	1274	-	-	-	-	-	-	-	-
Coating, Dow 15 on magnesium substrate	-	-	9	1274	-	9	1275	-	-	-	-	-
Coating, Dow 17 on magnesium substrate	-	-	9	1274	-	9	1275	-	-	-	-	-
Coating, Dow Corning 6510 on aluminum substrate	-	-	-	9	1159	-	-	-	-	-	-	-
Coating, dry ice on cat-A-Lac black substrate	-	-	-	9	864	-	-	-	-	-	-	-
Coating, dry ice on stainless steel substrate	-	-	-	9	864	-	-	-	-	-	-	-
Coating, Dutch Boy quick drying enamel on aluminum substrate	-	-	-	9	13	-	-	-	-	-	-	-
Coating, elvanol on fiberglass substrate	-	-	-	9	1145	9	1146	-	-	-	-	-



Substance Name	Thermal Conductivity		Specific Heat		Thermal Radiative Properties				Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emissivity		Reflectivity		Absorptivity		Transmissivity			
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Coating, gold on: (continued)														
Inconel X substrate	-	-	-	-	9	656	-	-	-	-	-	-	-	-
Magnesium substrate	-	-	-	-	9	660	-	-	-	-	-	-	-	-
Molybdenum substrate	-	-	-	-	9	651	-	-	-	-	-	-	-	-
Mylar substrate	-	-	-	-	9	651	-	-	9	675	-	-	-	-
NBS ceramic A418 substrate	-	-	-	-	9	656	-	-	-	-	-	-	-	-
Nickel substrate	-	-	-	-	9	652	9	672	-	-	-	-	-	-
Nickel oxide substrate	-	-	-	-	9	656	-	-	-	-	-	-	-	-
Polyester substrate	-	-	-	-	9	651	-	-	-	-	-	-	-	-
Polyurethane substrate	-	-	-	-	-	-	9	672	-	-	-	-	-	-
Quartz substrate	-	-	-	-	-	-	9	664	9	678	9	681	-	-
Silicone substrate	-	-	-	-	-	-	9	672	-	-	-	-	-	-
Stainless steel substrate	-	-	-	-	9	651	9	673	9	675	-	-	-	-
Titanium substrate	-	-	-	-	9	660	9	665	-	-	-	-	-	-
Coating, gold + palladium + $\Sigma$ Si on glass substrate	-	-	-	-	-	-	9	683	-	-	-	-	-	-
Coating, gold + silver on:														
Copper substrate	-	-	-	-	9	651	-	-	9	675	-	-	-	-
Stainless steel substrate	-	-	-	-	9	651	-	-	9	675	-	-	-	-
Coating, gold black on:														
Cellulose nitrate substrate	-	-	-	-	-	-	9	1175	9	1178	9	1181	-	-
Brass substrate	-	-	-	-	-	-	9	1175	-	-	-	-	-	-
Glass substrate	-	-	-	-	-	-	9	1175	-	-	9	1182	-	-
Coating, gold black + copper black on sodium chloride substrate	-	-	-	-	-	-	-	-	-	-	9	1185	-	-
Coating, gold black + nickel black on sodium chloride substrate	-	-	-	-	-	-	-	-	-	-	9	1187	-	-
Coating, graphite on:														
Aluminum oxide substrate	-	-	-	-	9	854	-	-	-	-	-	-	-	-
Brass substrate	-	-	-	-	-	-	9	859	-	-	-	-	-	-
Copper substrate	-	-	-	-	9	857	-	-	-	-	-	-	-	-
Silicon dioxide substrate	-	-	-	-	-	-	9	859	-	-	-	-	-	-
Tantalum substrate	-	-	-	-	9	854 855	-	-	-	-	-	-	-	-
Coating, hafnium oxide on:														
Quartz, fused, substrate	-	-	-	-	-	-	-	-	-	-	9	897	-	-
Tungsten substrate	-	-	-	-	9	895 896	-	-	-	-	-	-	-	-
Coating, hanovia liquid gold on:														
Ceramic tile substrate	-	-	-	-	-	-	9	672	-	-	-	-	-	-
Glass substrate	-	-	-	-	9	656	9	664	-	-	-	-	-	-
Inconel X substrate	-	-	-	-	9	656	-	-	-	-	-	-	-	-
Molybdenum substrate	-	-	-	-	9	651	-	-	-	-	-	-	-	-
Titanium substrate	-	-	-	-	9	660	9	665	-	-	-	-	-	-





Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.			
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Coating, lead chloride on germanium substrate	-	-	-	9 912	-	-	-	-	-
Coating, lead molybdenum tetraoxide on:									
Glass substrate	-	-	-	9 913	-	-	-	-	-
Potassium bromide substrate	-	-	-	9 913	-	-	-	-	-
Coating, lead + tin on copper substrate	-	-	9 690	-	9 691	-	-	-	-
Coating, liquid platinum on:									
Ceramic tile substrate	-	-	-	9 724	-	-	-	-	-
Glass substrate	-	-	9 722	-	-	-	-	-	-
Quartz substrate	-	-	-	9 724	-	-	-	-	-
Coating, lithium fluoride on:									
Aluminum substrate	-	-	-	9 1090	-	-	-	-	-
Glass substrate	-	-	-	9 1090	-	-	-	-	-
KRS-5 substrate	-	-	-	-	-	9 1092	-	-	-
Coating, magnesium + aluminum on glass substrate	-	-	-	9 693	-	-	-	-	-
Coating, magnesium aluminate on:									
Aluminum substrate	-	-	9 915	-	9 918	-	-	-	-
Nb-1Zr substrate	-	-	9 915 917	-	-	-	-	-	-
Coating, magnesium fluoride on:									
Glass substrate	-	-	-	9 1096	-	9 1105	-	-	-
Iron oxide substrate	-	-	9 1093	9 1096	9 1103	-	-	-	-
Platinum substrate	-	-	-	9 1098	9 1101	9 1105	-	-	-
Quartz, fused, substrate	-	-	-	9 1096 1098	9 1101	9 1105	-	-	-
Silicon dioxide substrate	-	-	-	9 1096 1098	9 1101	9 1105	-	-	-
Silicon monoxide substrate	-	-	9 1094	9 1096	-	-	-	-	-
Coating, magnesium on glass substrate	-	-	-	9 692	-	-	-	-	-
Coating, magnesium oxide on:									
Aluminum substrate	-	-	-	9 924	-	-	-	-	-
Black paint substrate	-	-	-	9 924	-	-	-	-	-
Nimonic 75 substrate	-	-	9 919	-	-	-	-	-	-
Coating, manganese on glass substrate	-	-	-	9 694	-	9 695	-	-	-
Coating, melamine formaldehyde on quartz substrate	-	-	-	-	9 1130	-	-	-	-
Coating, Metco XP-1103 on Armco iron substrate	-	-	9 696	-	9 697	-	-	-	-
Coating, Metco XP-1106 on Armco iron substrate	-	-	9 764	-	9 772	-	-	-	-
Coating, Metco XP-1109 on Armco iron substrate	-	-	9 673	-	9 674	-	-	-	-

Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.			
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Coating, Metco XP-1110 on Armco iron substrate	-	-	9 995	-	9 996	-	-	-	-
Coating, Metco XP-1114 on: Niobium substrate	-	-	9 981 984	-	-	-	-	-	-
Stainless steel substrate	-	-	9 981	-	-	-	-	-	-
Coating, Metco XP-1121 on: Nb-1Zr substrate	-	-	9 994	-	-	-	-	-	-
Stainless steel substrate	-	-	9 994	-	-	-	-	-	-
Coating, molybdenum conversion	-	-	9 1331 1333 1335 1337	9 1342	9 1345	-	-	-	-
Coating, molybdenum disilicide on: Bronze substrate	-	-	9 928	-	-	-	-	-	-
Molybdenum substrate	-	-	9 927 928 929	-	-	-	-	-	-
VM-1 molybdenum substrate	-	-	9 927	-	-	-	-	-	-
Coating, molybdenum on Armco iron substrate	-	-	9 696	-	9 697	-	-	-	-
Coating, molybdenum sulfide on Inconel X substrate	-	-	-	9 930	-	-	-	-	-
Coating, mylar on aluminum substrate	-	-	9 1042	-	-	-	-	-	-
Coating, NBS A-418 on Inconel substrate	-	-	9 455 459	-	-	-	-	-	-
Coating, NBS A-418 on stainless steel substrate	-	-	9 455 459	-	-	-	-	-	-
Coating, NBS N-143 on Inconel substrate	-	-	9 445 448	-	-	-	-	-	-
Coating, NBS N-143 on stainless steel substrate	-	-	9 445 448	-	-	-	-	-	-
Coating, neodymium on fused quartz substrate	-	-	-	-	-	9 698	-	-	-
Coating, nickel on: Copper substrate	-	-	9 700	9 702	-	-	-	-	-
Epoxy substrate	-	-	9 700	9 704	-	-	-	-	-
Polyurethane substrate	-	-	-	9 704	-	-	-	-	-
Steel substrate	-	-	9 700	-	-	-	-	-	-
Coating, nickel aluminate on Inconel substrate	-	-	9 706	-	-	-	-	-	-
Coating, nickel chromate on Nb-1Zr substrate	-	-	9 932	-	-	-	-	-	-
Coating, nickel + chromium on Inconel X substrate	-	-	9 709	9 712	-	-	-	-	-
Coating, nickel + chromium + EX4 on Hastelloy X substrate	-	-	9 707	-	-	-	-	-	-
Coating, nickel + cobalt on stainless steel substrate	-	-	9 715	9 716	-	-	-	-	-
Coating, nickel + molybdenum + EX4 on stainless steel substrate	-	-	9 717	-	-	-	-	-	-
Coating, niobium + titanium conversion	-	-	9 1350	-	-	-	-	-	-

Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.			
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Coating, niobium + zirconium conversion	-	-	9 1352	-	-	-	-	-	-
Coating, nitrocellulose on copper substrate	-	-	9 1131	-	-	-	-	-	-
Coating, nylon on stainless steel substrate	-	-	-	9 1132	-	-	-	-	-
Coating, optical black, Jersey standard	-	-	9 577	-	-	-	-	-	-
Coating, Owens-Illinois 650 on aluminum substrate	-	-	-	-	9 1167	-	-	-	-
Coating, pack cementation on:									
Molybdenum substrate	-	-	9 1333 1337	9 1342	-	-	-	-	-
Niobium substrate	-	-	9 1347 1348	9 1349	-	-	-	-	-
Tantalum substrate	-	-	9 1353 1355	9 1358	-	-	-	-	-
Titanium substrate	-	-	9 1359 1360	9 1362	-	-	-	-	-
Tungsten substrate	-	-	9 1363 1364	9 1365	-	-	-	-	-
Coating, palladium on									
Glass substrate	-	-	9 718	9 720	-	9 721	-	-	-
Inconel X substrate	-	-	9 718	-	-	-	-	-	-
Silicon substrate	-	-	-	9 720	-	-	-	-	-
Coating, platinum on:									
Ceramic tile substrate	-	-	-	9 724	-	-	-	-	-
Glass substrate	-	-	9 722	-	-	-	-	-	-
Quartz, fused, substrate	-	-	-	9 724	9 727	9 728	-	-	-
Coating, platinum black on unknown substrate	-	-	-	9 1188	-	-	-	-	-
Coating, polybutadiene on tin oxide substrate	-	-	-	-	-	9 1134	-	-	-
Coating, polyester on:									
Aluminum substrate	-	-	9 1135	-	-	-	-	-	-
Gold substrate	-	-	9 1135	-	-	-	-	-	-
Coating, polyimide fluorinated ethylene propylene on silver substrate	-	-	9 1133	-	-	-	-	-	-
Coating, polystyrene on glass substrate	-	-	-	9 1136 1137	-	-	-	-	-
Coating, polyurethane on:									
Aluminum substrate	-	-	-	9 1138 1140	-	-	-	-	-
Polyethylene substrate	-	-	-	-	-	9 1143	-	-	-
Stainless steel substrate	-	-	-	9 1140	-	-	-	-	-
Coating, polyvinyl alcohol on fiberglass substrate	-	-	-	9 1145	9 1146	-	-	-	-
Coating, polyvinyl butyral on quartz substrate	-	-	-	-	9 1147	-	-	-	-
Coating, polyvinyl chloride on:									
Aluminum substrate	-	-	-	9 1150	9 1154	-	-	-	-
Fiberglass substrate	-	-	-	9 1150	9 1152	-	-	-	-

Substance Name	Thermal Conduc-tivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffu-sivity		Visco-sity		Thermal Expan-sion	
					Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Coating, polyvinyl chloride on: (continued)																		
Nylon substrate	-		-		-		9	1150	9	1152	-		-		-		-	
Coating, polyvinylidene chloride on silicon substrate	-		-		-		-		-		9	1155	-		-		-	
Coating, potassium bromide on platinum substrate	-		-		9	934	-		-		-		-		-		-	
Coating, potassium chloride on lithium fluoride substrate	-		-		-		-		-		9	935	-		-		-	
Coating, potassium iodide on lithium fluoride substrate	-		-		-		9	936	-		-		-		-		-	
Coating, potassium silicate on: Aluminum substrate	-		-		-		9	937 1044	-		-		-		-		-	
Quartz substrate	-		-		-		-		9	938	-		-		-		-	
Coating, potassium tantalate on Gold substrate	-		-		-		9	1045	-		-		-		-		-	
Platinum substrate	-		-		-		9	1045	-		-		-		-		-	
Coating, PRF-6 MoSi <sub>2</sub> on molybdenum substrate	-		-		9	929 1331	-		-		-		-		-		-	
Coating, Rhodium on: Inconel X substrate	-		-		9	730	-		-		-		-		-		-	
Stainless steel substrate	-		-		9	729	-		9	731	-		-		-		-	
Coating, rokide A on: Inconel, oxidized, substrate	-		-		9	792	-		-		-		-		-		-	
Molybdenum substrate	-		-		9	788	9	796	9	803	-		-		-		-	
Stainless steel substrate	-		-		9	788 790	9	796	9	805	-		-		-		-	
Coating, rokide C on: Inconel substrate	-		-		9	885	-		-		-		-		-		-	
Molybdenum substrate	-		-		9	878 883	-		-		-		-		-		-	
Niobium substrate	-		-		9	878 885	-		-		-		-		-		-	
Stainless steel substrate	-		-		9	878	-		-		-		-		-		-	
Steel substrate	-		-		9	881 885	-		-		-		-		-		-	
Titanium 6Al-4V substrate	-		-		9	881 883	-		-		-		-		-		-	
Coating, rokide MA on: Aluminum substrate	-		-		9	915	-		9	918	-		-		-		-	
Nb-1Zr substrate	-		-		9	915 917	-		-		-		-		-		-	
Coating, rokide ZS on: Aluminum substrate	-		-		9	1024	-		9	1030	-		-		-		-	
Nb-1Zr substrate	-		-		9	1024	-		-		-		-		-		-	
Stainless steel substrate	-		-		9	1024 1026	9	1029	-		-		-		-		-	
Coating, RTV-602 on aluminum substrate	-		-		9	1156	9	1159	9	1164 1167	-		-		-		-	



Substance Name	Thermal	Specif.	Thermal Radiative Properties				Thermal	Visco-	Thermal
	Conduc-	Heat	Emis-	Reflec-	Absorp-	Trans-	Diffu-	sity	Expans-
	tivity		sivity	tivity	tivity	missiv.	sivity		ion
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Coating, silicon Durak-MG on molybdenum substrate	-	-	9 1333 1335	-	-	-	-	-	-
Coating, silicon monoxide on:									
Aluminum substrate	-	-	9 1074	9 1077	9 1080	-	-	-	-
Aluminum oxide substrate	-	-	-	9 1077	-	-	-	-	-
Inconel substrate	-	-	9 1075	-	-	-	-	-	-
Platinum substrate	-	-	9 1075	-	-	-	-	-	-
Coating, silicon nitride on:									
Gallium arsenide substrate	-	-	-	-	-	9 953	-	-	-
Silicon substrate	-	-	-	-	-	9 953	-	-	-
Coating, silicone binder with TiO <sub>2</sub> on Dow 15 treated Mg alloy substrate	-	-	9 212	-	9 263	-	-	-	-
Coating, silver on:									
Chromium substrate	-	-	-	9 738	-	-	-	-	-
Copper substrate	-	-	9 734	-	9 747	-	-	-	-
Epoxy substrate	-	-	9 733	9 742	-	-	-	-	-
Glass substrate	-	-	-	9 738 743	-	9 752	-	-	-
Mylar substrate	-	-	-	9 746	-	9 750	-	-	-
Nickel substrate	-	-	9 734	-	9 747	-	-	-	-
Polyurethane substrate	-	-	9 733	9 741	-	-	-	-	-
Quartz substrate	-	-	-	9 738 743	-	9 750 752	-	-	-
Sapphire substrate	-	-	-	-	-	9 750	-	-	-
Silicone substrate	-	-	9 733	9 741	-	-	-	-	-
Stainless steel substrate	-	-	9 734 736	9 738 742	9 747	-	-	-	-
Coating, silver + aluminum on glass substrate	-	-	-	9 754	-	-	-	-	-
Coating, silver black on unknown substrate	-	-	-	-	-	9 1189	-	-	-
Coating, silver sulfide on silver substrate	-	-	9 954	-	9 955	-	-	-	-
Coating, sodium chloride on aluminum substrate	-	-	-	9 1081	-	-	-	-	-
Coating, sodium salicylate on MgO pigmented paint substrate	-	-	-	9 956	-	-	-	-	-
Coating, solder on copper substrate	-	-	9 758	-	9 759	-	-	-	-
Coating, speculum on:									
Glass substrate	-	-	-	9 645	-	-	-	-	-
Steel substrate	-	-	-	9 645 757	-	-	-	-	-
Coating, strontium titanate on:									
Aluminum substrate	-	-	9 958	-	9 963	-	-	-	-
Nb-1Zr substrate	-	-	9 958 962	-	-	-	-	-	-
Stainless steel substrate	-	-	9 958	-	-	-	-	-	-





Substance Name	Thermal	Specif.	Thermal Radiative Properties				Thermal	Visco-	Thermal
	Conduc-	Heat	Emis-	Reflec-	Absorp-	Trans-	Diffu-	sity	Expan-
	tivity		sivity	tivity	tivity	missiv.	sivity		sion
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Coating, tungsten carbide + cobalt on iron substrate	-	-	9 995	-	9 996	-	-	-	-
Coating, tungsten + chromium + aluminum oxide on Inconel substrate	-	-	9 774	-	-	-	-	-	-
Coating, tungsten + cobalt on Inconel X substrate	-	-	-	9 776	-	-	-	-	-
Coating, uranium on glass substrate	-	-	-	9 779	-	9 780	-	-	-
Coating, uranium dioxide on tungsten substrate	-	-	9 997	-	-	-	-	-	-
Coating, vanadium oxide on:									
Sapphire substrate	-	-	-	9 999	-	9 1000	-	-	-
Tungsten substrate	-	-	9 998	-	-	-	-	-	-
Coating, vanadium oxide on tungsten substrate	-	-	9 998	-	-	-	-	-	-
Coating, zinc black on:									
Brass substrate	-	-	-	9 1190	-	-	-	-	-
Metastyrane substrate	-	-	-	9 1190	-	-	-	-	-
Plioform substrate	-	-	-	-	-	9 1191	-	-	-
Ptroxilin substrate	-	-	-	-	-	9 1191	-	-	-
Coating, zinc on iron substrate	-	-	-	9 781	-	-	-	-	-
Coating, zinc oxide on titanium substrate	-	-	-	9 1003	-	-	-	-	-
Coating, zinc selenide on quartz substrate	-	-	-	9 1004	-	9 1005	-	-	-
Coating, zinc sulfide on glass substrate	-	-	-	9 1007 1008	-	-	-	-	-
Coating, zinc telluride on quartz substrate	-	-	-	-	-	9 1009	-	-	-
Coating, zirconium on molybdenum substrate	-	-	9 782	-	-	-	-	-	-
Coating, zirconium oxide on:									
Aluminum substrate	-	-	-	9 1017	-	-	-	-	-
Inconel substrate	-	-	9 1011	9 1017	9 1021	-	-	-	-
Inconel X substrate	-	-	9 1014	9 1017	-	-	-	-	-
Mild steel substrate	-	-	9 1011 1014	-	-	-	-	-	-
Nimonic 75 substrate	-	-	9 1011	-	-	-	-	-	-
Stainless steel substrate	-	-	9 1011	9 1017	-	-	-	-	-
Coating, zirconium silicate on:									
Aluminum substrate	-	-	9 1024	-	9 1030	-	-	-	-
Nb-1 Zr substrate	-	-	9 1024 1028	-	-	-	-	-	-
Stainless steel substrate	-	-	9 1024 1026	9 1029	-	-	-	-	-
Coating, zirconium titanate on beryllium substrate	-	-	9 1032	-	-	-	-	-	-
Coating, wulfenite on potassium bromide substrate	-	-	-	9 913	-	-	-	-	-
Coating, yttrium oxide on tungsten substrate	-	-	9 1001	-	-	-	-	-	-





Substance Name	Thermal	Specif.	Thermal Radiative Properties				Thermal	Visco-	Thermal
	Conduc-	Heat	Emis-	Reflec-	Absorp-	Trans-	Diffu-	sity	Expan-
	tivity		sivity	tivity	tivity	missiv.	sivity		sion
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Cobalt-yttrium intermetallic compounds:									
Co <sub>3</sub> Y	-	-	-	-	-	-	-	-	12 514 517
Co <sub>11</sub> Y <sub>2</sub>	-	-	-	-	-	-	-	-	12 513 515 516
Cobalt zinc ferrate, Co(Zn)Fe <sub>2</sub> O <sub>4</sub>	2 272	-	-	-	-	-	-	-	-
Codfish, pulp	-	-	-	-	-	-	10 635	-	-
Coke, petroleum	2 765	-	-	-	-	-	10 22 35	-	-
Columbium	1 245	4 153	-	-	-	-	10 125	-	-
Cominco 69	-	-	-	-	-	-	-	-	12 395
Composite, asbestos-phenolic 9526 D laminate	-	-	-	-	-	-	-	-	13 1525
Composite, asbestos-phenolic resin	-	-	-	-	-	-	-	-	13 1524
Composite, asbestos reinforced phenolic	-	-	-	-	-	-	-	-	13 1525
Composite, asbestos-terflon	-	-	-	-	-	-	-	-	13 1530
Composite, asphalt-glass wool pad	2 1108	-	-	-	-	-	-	-	-
Composite, boron fiber/epoxy resin	-	-	-	-	-	-	-	-	13 1531
Composite, carbitex 100	-	-	-	-	-	-	-	-	13 1578
Composite, carbitex 700	-	-	-	-	-	-	-	-	13 1578
Composite, graphite fiber/epoxy resin, courtaulds HMS, hercu	-	-	-	-	-	-	-	-	13 1584
Composite, graphite fiber/epoxy resin, courtaulds HMS, pseud	-	-	-	-	-	-	-	-	13 1584
Composite, glass fabric/epoxy resin	-	-	-	-	-	-	-	-	13 1537
Composite, glass fabric/polyester resin	-	-	-	-	-	-	-	-	13 1542
Composite, glass fiber board	2 1124	-	-	-	-	-	-	-	-
Composite, glass fiber/epoxy	-	-	-	-	-	-	-	-	13 1547
Composite, glass fiber/phenolic resin	-	-	-	-	-	-	-	-	13 1559
Composite, glass fiber/phenyl silane resin	-	-	-	-	-	-	-	-	13 1568
Composite, glass fiber reinforced phenolic	-	-	-	-	-	-	-	-	13 1560
Composite, glass fiber/silicone resin	-	-	-	-	-	-	-	-	13 1567
Composite, glass cloth-reinforced/phenolic resin laminates	-	-	-	-	-	-	10 558 559	-	-
Composite, graphite-cloth laminate	-	-	-	-	-	-	-	-	13 1569
Composite, graphite fabric/carbon	-	-	-	-	-	-	-	-	13 1576
Composite, graphite fabric/phenolic resin	-	-	-	-	-	-	-	-	13 1568
Composite, graphite fiber/epoxy resin	-	-	-	-	-	-	-	-	13 1582
Composite, graphite fiber/epoxy resin, modmor II-Narmco 52	-	-	-	-	-	-	-	-	13 1585
Composite, Insulok, nonmetallic laminate	2 1023 1024	-	-	-	-	-	-	-	-
Composite, Iamicaid, laminate	2 1023 1024	-	-	-	-	-	10 555	-	-
Composite, laminate, epoxy resin	2 1029	-	-	-	-	-	-	-	-
Composite, laminates, metallic-nonmetallic	2 1036	-	-	-	-	-	10 553	-	-

Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.			
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Composite, laminates, nonmetallic	-	-	-	-	-	-	10 554	-	-
Composite, nylon fabric/phenolic resin	-	-	-	-	-	-	-	-	13 1600
Composite, OTWR	-	-	-	-	-	-	-	-	13 1612
Composite, phenolic-asbestos laminate	-	-	-	-	-	-	10 555	-	-
Composite, phenolic-asbestos cloth laminate	-	-	-	-	-	-	10 556 557	-	-
Composite, phenolic-graphite cloth laminate	-	-	-	-	-	-	10 557 558	-	-
Composite, phenolic-graphite mat laminate	-	-	-	-	-	-	10 558	-	-
Composite, phenolic refrasil	-	-	-	-	-	-	-	-	13 1610
Composite, phenolic-refrasil cloth laminate	-	-	-	-	-	-	10 557	-	-
Composite, potassium titanium oxide fiber/epoxy resin	-	-	-	-	-	-	-	-	13 1605
Composite, sandwiches, nonmetallic	2 1044	-	-	-	-	-	-	-	-
Composite, sandwiches, metallic-nonmetallic	2 1047	-	-	-	-	-	-	-	-
Composite, scotchply laminate, nonmetallic	2 1029	-	-	-	-	-	-	-	-
Composite, silicon dioxide fiber/phenolic resin, RAD-60	-	-	-	-	-	-	-	-	13 1612
Composite, silicon oxide fiber/phenolic resin	-	-	-	-	-	-	-	-	13 1608
Concrete	-	-	-	-	-	-	10 572	-	-
Concrete, asphaltic bituminous	2 863	-	-	-	-	-	-	-	-
Concrete, baryte	-	-	-	-	8 704	-	-	-	-
Concrete, bitumin	2 863	-	-	-	-	-	-	-	-
Concrete, bituminous aggregate	2 863	-	-	-	-	-	-	-	-
Concrete, cinder aggregate	2 869 870	-	-	-	-	-	-	-	-
Concrete, commercial castable	2 871 875 876 877 878	-	-	-	-	-	-	-	-
Concrete, diatomaceous aggregate	2 874	-	-	-	-	-	-	-	-
Concrete, expanded burned clay aggregate	2 870	-	-	-	-	-	-	-	-
Concrete, foamed light weight	2 881	-	-	-	-	-	-	-	-
Concrete, Haydite aggregate	2 870	-	-	-	-	-	-	-	-
Concrete, light weight	2 874	-	-	-	-	-	-	-	-
Concrete, limestone aggregate	2 869	-	-	-	-	-	-	-	-
Concrete, limestone gravel	2 864 865	-	-	-	-	-	-	-	-
Concrete, lumite cement	2 871	-	-	-	-	-	-	-	-
Concrete, metallurgical pumice	2 863 864	-	-	-	-	-	-	-	-
Concrete, monolithic wall	2 1126	-	-	-	-	-	-	-	-
Concrete, paraffin	2 863	-	-	-	-	-	-	-	-
Concrete, Portland cement	2 871	-	-	-	-	-	-	-	-

Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emissivity		Reflectivity		Absorptivity		Transmissiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Concrete, sand cement	2	874	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Concrete, sand and gravel aggregate	2	868 869	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Concrete, slag	2	864 880 881	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Concrete, slag aggregate limestone treated	2	870	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Concrete, slag direct process	2	864	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Concrete, slag expanded	2	878 879	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Concrete, slag leuna	2	864	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Constantan, copper alloy	2	864 880 881	4	341	-	-	-	-	-	-	-	-	10	234	-	-	12	781
Copoly(chloroethylene-vinyl-acetate)	2	943	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copoly(1,1-difluoroethylene-hexafluoropropene)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1460
Copoly(1,1-difluoroethylene-hexafluoropropene), viton A rubber	2	983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copoly(ethylene-propylene)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1440
Copoly(formaldehyde-urea)	2	944	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copoly(formaldehyde-urea), mipora	2	944	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copoly(vinyl chloride-vinyl acetate)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1495
Copper, Cu	1	68	4	51	7	136 142 149 152	7	158 165 169 172	7	177 179 181 184 184	-	-	10	51	-	-	12	77
Copper, B.S. 1433	-	-	-	-	-	-	7	173 174	7	194	-	-	-	-	-	-	-	-
Copper, beryllium	1	539	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper, coalesced	1	69 72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper, deoxidized	-	-	-	-	-	-	-	-	-	-	-	-	10	58	-	-	-	-
Copper, electrolytic	1	72 73	4	51	-	-	-	-	-	-	-	-	10	59	-	-	12	80
Copper, electrolytic tough pitch	1	70 72	4	52	-	-	-	-	-	-	-	-	10	54	-	-	-	-
Copper, electrolytic tough pitch, QQC 502	-	-	4	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper, electrolytic tough pitch, QQC 576	-	-	4	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper, freecutting	1	582	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper, OFHC	1	69 74	4	52	7	138	-	-	7	189	-	-	10	53 54 55 57	-	-	12	80
Copper, OFHC, polycrystalline	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	80
Copper, phosphorized	-	-	-	-	-	-	-	-	-	-	-	-	10	54	-	-	-	-
Copper, phosphorus deoxidized	1	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper, single crystal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	80
Copper, spectrographically standardized	-	-	-	-	-	-	-	-	-	-	-	-	10	57	-	-	-	-

Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion		
				Emissivity		Reflectivity		Absorptivity		Transmissiv.								
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Copper, standard reference material 736	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	82	
Copper alloys:																		
Cu + Ag	1	578	-	-	-	-	-	-	-	-	-	10	236	-	-	-	-	-
Cu + Al	1	530	4	323	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + As	1	535	-	-	-	-	-	-	-	-	-	10	232	-	-	-	-	-
Cu + Au	1	548	-	-	-	-	-	-	-	-	-	-	-	-	-	12	763	-
Cu + Be	1	538	-	-	-	-	-	-	-	-	-	-	-	-	-	12	678	-
Cu + Be, beryllium bronze	1	539	-	-	-	-	-	-	-	-	-	-	-	-	-	12	679	-
Cu + Cd	1	541	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Co	1	545	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Cr	1	542	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Cr, Russian cupralloy, type 5	1	543	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Fe	1	551	4	331	-	-	-	-	-	-	-	-	-	-	-	12	771	-
Cu + Ga	-	-	4	327	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	768	-
Cu + Mg	-	-	4	335	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Mn	1	557	4	338	-	-	-	-	-	-	-	-	-	-	-	12	773	-
Cu + Ni	1	561	4	341	7	908	-	-	-	-	-	10	233	-	-	12	778	-
Cu + Ni, advance	1	564 970	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Ni, constantan	1	564	4	341	-	-	-	-	-	-	-	10	234	-	-	12	781	-
Cu + Ni, Lohm	1	564	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Ni, Russian, NM-81 cuprnickel	1	562	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Ni, Russian cupro nickel, NM-81	1	562	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + P	1	571	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Pb	1	554	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Pd	1	568	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Pt	1	574	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Sb	1	534	-	-	-	-	-	-	-	-	-	10	231	-	-	-	-	-
Cu + Si	1	575	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Sn	1	584	-	-	7	910	-	-	-	-	-	10	237	-	-	12	788	-
Cu + Te	1	581	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Te, ASTM B301-58T	1	582	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Zn	1	588	4	346	7	912 914	7	917 920	7	923 925 928	-	10	238	-	-	12	796	-
Cu + Zn, brass, 70/30	1	590	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Zn, brass, alpha	-	-	4	346	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cu + Al + EX4	1	952	-	-	7	1159 1162	7	1166	7	1169	-	10	288	-	-	12	1089	-
Cu + Al + EX4, bronze	1	531 532 953	-	-	7	1160	-	-	-	-	-	-	-	-	-	12	1091	-
Cu + Be + EX4	1	955	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1095	-
Cu + Be + EX4, Berylico 25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1097	-





Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion		
				Emissivity		Reflectivity		Absorptivity		Transmissivity								
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Copper glance, copper sulfide	2	699	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper-gold intermetallic compound, CuAu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	519 520 522	
Copper indium telluride, CuInTe <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1270	
Copper iodide, CuI	2	562	-	-	8	999	-	-	8	1001	-	-	-	-	-	13	1122	
Copper iron oxide, CuO·Fe <sub>2</sub> O <sub>3</sub>	-	5	1437	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Copper iron oxide, nonstoichiometric	-	5	1434	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Copper-magnesium intermetallic compound, Cu <sub>2</sub> Mg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	523	
Copper oxides:																		
CuO	-	5	80	-	8	247	-	-	8	249	-	-	-	-	-	-	-	
Cu <sub>2</sub> O	2	147	5	76	8	243 245	-	-	-	8	249	-	-	-	-	-	-	
Copper selenide, Cu <sub>2</sub> Se <sub>2</sub>	1	1276	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Copper selenide-copper antimony selenide, mixture	1	1401	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Copper silicides:																		
Cu <sub>8</sub> Si	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1211	
Cu <sub>18</sub> Si <sub>4</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1212	
Copper sulfides:																		
CuS	-	5	662	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cu <sub>2</sub> S	2	699	5	665	-	-	-	-	-	-	-	-	-	-	-	-	-	
Copper-tin intermetallic compound, Cu <sub>4</sub> Sn	-	-	-	-	8	1352	-	-	-	-	-	-	-	-	-	-	-	
Copper telluride + indium telluride + silver telluride, mixture	1	1406	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Copper + titanium nickel compound, mixture	1	1433	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Copper-zinc intermetallic compounds:																		
CuZn	-	-	-	-	8	1285	-	-	-	-	-	-	-	-	-	12	525	
Cu <sub>5</sub> Zn <sub>8</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	524	
Copperas	-	5	1200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Coralite-cobaltic oxide	-	5	73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cordierite	2	918	5	1503	-	-	-	-	-	8	1650	-	-	-	-	13	727	
Cordierite, 202	2	919	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cordierite, Rutgers	2	919	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cordierite, steatite	2	919	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cork	2	1063	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Corundum	2	94 99	5	26	-	-	-	-	-	-	-	10	383	-	-	13	179 182 183	
Cotton	2	1068	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cotton, fabric	2	1093	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cotton, medical	2	1069 1070	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.			
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Cotton, mineral	2 1147	-	-	-	-	-	-	-	-
Cotton, silicate felt fabric	2 1094	-	-	-	-	-	-	-	-
Cotton, waste	2 1070	-	-	-	-	-	-	-	-
Cotton, wool	2 1096	-	-	-	-	-	-	-	-
Cristobalite, silicon dioxide	-	-	-	-	-	-	-	-	13 353
Crotonylene, 2-butyne	-	6s 12	-	-	-	-	-	-	-
Cryolite, halide mineral	-	-	-	8 1660	-	-	-	-	-
Crystex, sulfur	-	-	-	8 117	-	-	-	-	-
Crystolon, SiC	-	-	8 800	8 805	-	-	-	-	-
Cumene	-	6s 22	-	-	-	-	-	-	-
Cumol	-	6s 22	-	-	-	-	-	-	-
Cupric oxide	-	-	-	8 247	-	8 249	-	-	-
Cuprous oxide	-	-	8 243 245	-	-	8 249	-	-	-
Cuprum	1 68	4 51	-	-	-	-	-	-	-
Cyanogen	-	6s 24	-	-	-	-	-	-	-
Cyanogen chloride	-	6s 24	-	-	-	-	-	-	-
1,4-Cyclohexadienedione	-	6s 2	-	-	-	-	-	-	-
Cyclohexane	-	6s 25	-	-	-	-	-	-	-
Cyclohexane-n-hexane, mixture	-	-	-	-	-	-	-	11 408	-
Cyclohexene	-	6s 25	-	-	-	-	-	-	-
Cyclohexylmethane	-	6s 62	-	-	-	-	-	-	-
Cyclopropane	-	6s 26	-	-	-	-	-	-	-
Cyclopropane-helium, mixture	3 325	-	-	-	-	-	-	-	-
p-Cymene	-	6s 26	-	-	-	-	-	-	-
p-Cymol	-	6s 26	-	-	-	-	-	-	-
n-Decane	3 164	6 170	-	-	-	-	-	-	-
n-Decane-methane, mixture	-	-	-	-	-	-	-	11 410	-
Deirin acetal DA-500	-	-	-	-	-	-	-	-	13 1479
Deuteriomethane	-	6s 58	-	-	-	-	-	-	-
Deuteriotritiomethane	-	6s 58	-	-	-	-	-	-	-
Deuterium, D <sub>2</sub>	3 21	6 15	-	-	-	-	-	11 13	-
Deuterium, monatomic	-	6s 26	-	-	-	-	-	-	-
Deuterium fluoride, DF	-	6s 47	-	-	-	-	-	-	-
Deuterium hydride, HD	-	6s 48	-	-	-	-	-	-	-
Deuterium-helium, mixture	3 327	-	-	-	-	-	-	-	-
Deuterium-hydrogen, mixture	3 407	-	-	-	-	-	-	11 413	-
Deuterium-hydrogen deuteride, mixture	-	-	-	-	-	-	-	11 415	-
Deuterium hydrogen sulfide	-	6s 51	-	-	-	-	-	-	-
Deuterium-krypton, mixture	3 349	-	-	-	-	-	-	-	-
Deuterium-krypton-neon, mixture	3 491	-	-	-	-	-	-	-	-
Deuterium-neon, mixture	3 360	-	-	-	-	-	-	-	-
Deuterium-nitrogen, mixture	3 410	-	-	-	-	-	-	-	-

[illegible]



[illegible]















Substance Name	Thermal Conductivity		Specific Heat		Thermal Radiative Properties				Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emissivity		Reflectivity		Absorptivity		Transmissivity			
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Formaldehyde	-	6s	42	-	-	-	-	-	-	-	-	-	-	-
Formalin	-	6s	42	-	-	-	-	-	-	-	-	-	-	-
Formalith	-	6s	42	-	-	-	-	-	-	-	-	-	-	-
Formic aldehyde	-	6s	42	-	-	-	-	-	-	-	-	-	-	-
Formic ether	-	6s	38	-	-	-	-	-	-	-	-	-	-	-
Formol	-	6s	42	-	-	-	-	-	-	-	-	-	-	-
Formonitrile	-	6s	46	-	-	-	-	-	-	-	-	-	-	-
Formyl	-	6s	43	-	-	-	-	-	-	-	-	-	-	-
Formyl tribromide	-	6s	5	-	-	-	-	-	-	-	-	-	-	-
Forsterite, $Mg_2SiO_4$	2	275	-	-	-	-	8	1689	8	1692	-	-	-	13 720
Frenchtown 4402	-	-	-	-	8	144 147	-	-	-	-	-	-	-	-
Freon 10	3	156	6	159	-	-	-	-	-	-	-	-	-	-
Freon 11	3	183	6	200	-	-	-	-	-	-	-	-	-	-
Freon 12	3	187	6	204	-	-	-	-	-	-	-	-	-	-
Freon 13	3	191	6	210	-	-	-	-	-	-	-	-	-	-
Freon 20	3	161	6	166	-	-	-	-	-	-	-	-	-	-
Freon 21	3	193	6	212	-	-	-	-	-	-	-	-	-	-
Freon 22	3	197	6	218	-	-	-	-	-	-	-	-	-	-
Freon 30	-	6s	28	-	-	-	-	-	-	-	-	-	-	-
Freon 31	-	6s	21	-	-	-	-	-	-	-	-	-	-	-
Freon 41	-	6s	42	-	-	-	-	-	-	-	-	-	-	-
Freon 112	-	6s	90	-	-	-	-	-	-	-	-	-	-	-
Freon 113	3	201	6	224	-	-	-	-	-	-	-	-	-	-
Freon 114	3	205	6	228	-	-	-	-	-	-	-	-	-	-
Freon 116	-	6s	44	-	-	-	-	-	-	-	-	-	-	-
Freon 123	-	6s	29	-	-	-	-	-	-	-	-	-	-	-
Freon 130	-	6s	90	-	-	-	-	-	-	-	-	-	-	-
Freon 140	-	6s	91	-	-	-	-	-	-	-	-	-	-	-
Freon 141	-	6s	28	-	-	-	-	-	-	-	-	-	-	-
Freon 143	-	6s	92	-	-	-	-	-	-	-	-	-	-	-
Freon 161	-	6s	41	-	-	-	-	-	-	-	-	-	-	-
Frigen 114	-	6s	29	-	-	-	-	-	-	-	-	-	-	-
Fuel, SNAP	-	-	-	-	-	-	-	-	-	10	541	-	-	-
Furan	-	6s	43	-	-	-	-	-	-	-	-	-	-	-
2-Furan carbinol	-	6s	43	-	-	-	-	-	-	-	-	-	-	-
Furfuralcohol	-	6s	43	-	-	-	-	-	-	-	-	-	-	-
Furfuran	-	6s	43	-	-	-	-	-	-	-	-	-	-	-
Furfuryl alcohol	-	6s	43	-	-	-	-	-	-	-	-	-	-	-
$\alpha$ -Furfuryl carbinol	-	6s	43	-	-	-	-	-	-	-	-	-	-	-
Gabbro	2	818	-	-	-	-	8	1681	-	-	-	-	-	-
Gadolinium, Gd	1	93	4	72	-	-	7	204	-	7	207	10	67	12 107
Gadolinium boride, $Gd_2B_3$	-	-	-	-	8	723	-	-	-	8	727	-	-	-



Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emissivity		Reflectivity		Absorptivity		Transmissiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Gehlenite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	727
Genetron 11	3	183	6	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Genetron 12	3	187	6	204	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Genetron 13	3	191	6	210	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Genetron 22	3	197	6	218	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Genetron 31	-	-	6s	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Genetron 113	3	201	6	224	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Genetron 114	3	205	6	228	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Genetron 123	-	-	6s	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Genetron 141	-	-	6s	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Genetron 1132A	-	-	6s	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Germanium, Ge	1	108	4	79	7	219 222 224	7	231	-	-	7	236 240	10	69	-	-	12	116
Germanium 74, enriched	1	112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Germanium alloy, Ge + Si	1	597	-	-	-	-	-	-	-	-	-	-	10	241	-	-	-	-
Germanium hydride, GeH <sub>4</sub>	-	-	5	1033	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Germanium-lanthanum intermetallic compound, GeLa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	537
Germanium-magnesium intermetallic compound, GeMg <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	538
Germanium oxides:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GeO	-	-	-	-	-	-	-	-	-	-	8	549	-	-	-	-	-	-
GeO <sub>2</sub>	-	-	5	98	-	-	8	271	-	-	-	-	-	-	-	-	-	-
Quartz type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	243
Rutile type	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	247
Germanium-praseodymium intermetallic compounds:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GePr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	540 542 544
Ge <sub>2</sub> Pr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	539 542 543
Ge <sub>3</sub> Pr <sub>8</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	541 542 545
Germanium silicide, nonstoichiometric	-	-	5	574	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Germanium telluride, GeTe	1	1280	-	-	-	-	8	1250	-	-	-	-	-	-	-	-	13	1270
Glass, aluminosilicate	-	-	5	1227	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, aluminosilicate 723	2	923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, aluminum silicate	-	-	-	-	8	1523	8	1525	8	1527	8	1528 1530	-	-	-	-	-	-
Glass, amber	2	924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, AO 1053	-	-	-	-	-	-	-	-	-	-	8	1533	-	-	-	-	-	-
Glass, arsenic	-	-	-	-	-	-	-	-	-	-	8	1535	-	-	-	-	-	-
Glass, arsenic-selenium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1348
Glass, barium borate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1349

Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emissivity		Reflectivity		Absorptivity		Transmissivity							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Glass, boric oxide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1352
Glass, borosilicate	2	923 924	5	1230	8	1539 1541	8	1543	8	1545	8	1546 1547 1549	-	-	-	-	13	1355
Glass, borosilicate, 3235	2	923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, borosilicate, crown	2	923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, borosilicate, pyrex 7740	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1356
Glass, calcium aluminate	-	-	-	-	-	-	8	1551	-	-	8	1553	-	-	-	-	-	-
Glass, calcium borate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1358
Glass, cellular	2	923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, ceramics cercor code 9690	-	-	-	-	-	-	-	-	-	-	-	-	10	583	-	-	-	-
Glass, colorless	2	924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, Corning 0080	2	511 928	-	-	-	-	-	-	-	-	-	-	10	441 578	-	-	13	1360
Glass, Corning 0160	-	-	-	-	-	-	-	-	-	-	8	1642	-	-	-	-	-	-
Glass, Corning 1173	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1361
Glass, Corning 1723	-	-	5	1227	8	1524	8	1526	8	1527	8	1529 1531	10	432 578	-	-	-	-
Glass, Corning 7570	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1362
Glass, Corning 7740	2	933	-	-	8	1580	8	1588	8	1589	8	1590 1594	10	437 578	-	-	-	-
Glass, Corning 7900	-	-	-	-	8	1622	8	1626	8	1627	8	1629 1633	10	436 578	-	-	-	-
Glass, Corning 7905	-	-	-	-	-	-	-	-	-	-	8	1633	-	-	-	-	-	-
Glass, Corning 7910	-	-	-	-	-	-	-	-	-	-	8	1633	-	-	-	-	-	-
Glass, Corning 7940	-	-	-	-	8	1570	8	1572	8	1573	8	1575 1577 1578	-	-	-	-	-	-
Glass, Corning 8325	-	-	-	-	-	-	-	-	-	-	-	-	10	435 578	-	-	-	-
Glass, Corning 8362	-	-	-	-	-	-	-	-	-	-	-	-	10	439 578	-	-	-	-
Glass, Corning 8363	-	-	-	-	-	-	-	-	-	-	8	1642	10	579	-	-	-	-
Glass, Corning 8370	-	-	-	-	-	-	-	-	-	-	-	-	10	579	-	-	-	-
Glass, Corning 9606	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1363
Glass, Corning 9690	-	-	-	-	8	1639	-	-	-	-	-	-	-	-	-	-	-	-
Glass, Corning 9752	-	-	-	-	8	1637 1638	8	1640	-	-	-	-	-	-	-	-	-	-
Glass, Corning 9863	-	-	-	-	-	-	-	-	-	-	8	1642	-	-	-	-	-	-
Glass, electroconducting	-	-	-	-	8	1559	8	1561	8	1563	8	1564 1566	-	-	-	-	-	-
Glass, flint	-	-	-	-	8	1644	8	1646	-	-	8	1648	-	-	-	-	-	-
Glass, foam	2	924 925	-	-	-	-	-	-	-	-	-	-	10	579	-	-	-	-
Glass, fused silica	2	925	-	-	8	1568 1569	8	1571	8	1573	8	1574 1576 1578	-	-	-	-	-	-
Glass, green	2	923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, high silica	-	-	5	1234	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, Jena	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1364

Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
	V.	Page		Emissivity	Reflectivity		Absorptivity		Transmissivity		V.	Page	V.	Page	V.	Page	
			V.		Page	V.	Page	V.	Page	V.							Page
Glass, Jena Gerate	2	924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Glass, kimble N-51A	-	-	-	8	1542	8	1544	-	-	8	1548	-	-	-	-	-	
Glass, L.O.F. 81E 19778	-	-	-	8	1560	8	1562	8	1563	8	1565 1567	-	-	-	-	-	
Glass, L.O.F. PB 19195	-	-	-	8	1560	8	1562	8	1563	8	1565 1567	-	-	-	-	-	
Glass, lead	2	923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Glass, lime	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1366	
Glass, monax	2	924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Glass, Phoenix	2	924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Glass, Pittsburgh no. 3235	-	-	5	1232	-	-	-	-	-	-	-	-	-	-	-	-	
Glass, plate	2	923 924 925 926	5	1241	-	-	-	-	-	-	-	10	579	-	-	-	
Glass, plate, golden	2	924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Glass, plate No. 9330, Libbey-Owens-Ford	-	-	5	1241	-	-	-	-	-	-	-	-	-	-	-	-	
Glass, pyrex	2	499 923 924 926 927	5	1230	-	-	-	-	-	-	-	-	-	-	13	1369	
Glass, pyrex, ordinary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1371	
Glass, pyrex 774	2	923 925	5	1232	8	1582 1584	8	1586 1588	-	-	8	1592	-	-	-	-	
Glass, pyrex 7740	2	499 924 926	-	-	-	-	-	-	-	-	-	10	578	-	13	1356 1371	
Glass, pyrex G702-EJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1371	
Glass, pyroceram	-	-	5	1237	-	-	-	-	-	-	-	-	-	-	-	-	
Glass, Schott BK-8	-	-	-	-	-	-	-	-	-	-	8	1533	-	-	-	-	
Glass, Schott B and L 529516	-	-	-	-	-	-	-	-	-	-	8	1533	-	-	-	-	
Glass, Schott K5	-	-	-	-	-	-	-	-	-	-	8	1533	-	-	-	-	
Glass, Schott KZ SF-4	-	-	-	-	-	-	-	-	-	-	8	1533	-	-	-	-	
Glass, Schott SF-2	-	-	-	-	-	-	-	-	-	-	8	1533	-	-	-	-	
Glass, silica	2	923 925 926	5	202	-	-	-	-	-	-	-	-	-	-	-	-	
Glass, silicate	2	511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Glass, soda	2	923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Glass, soda lime	2	926	5	1240	8	1609	8	1612	8	1614	8	1615 1617	-	-	-	-	
Glass, soda lime C.G.W. code 0080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1360	
Glass, soda lime plate	2	926	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Glass, soda lime silica	2	511 924 927	5	1240	-	-	-	-	-	-	-	-	-	-	-	-	
Glass soda lime silica plate	2	923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Glass, soda silica	-	-	-	-	-	-	-	-	-	-	8	1650	-	-	-	-	
Glass, sodium borate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1374	



Substance Name	Thermal Conduc-tivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffu-sivity		Visco-sity		Thermal Expan-sion		
				Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.								
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
NaBO <sub>3</sub>	-	-	5	1552	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	-	-	5	1556	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, sodium silicate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1379	-
Glass, sodium silicate no. 23	-	-	5	1240	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, soft	2	511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, solex 2808 plate	2	923	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, solex 2808X plate	2	925	5	1240	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, solex S	2	925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, solex S plate	2	923	5	1240	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, strontium borate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1380	-
Glass, synthetic tektite	-	-	-	-	-	-	-	-	-	-	-	10	579	-	-	-	-	-
Glass, television tube	-	-	-	-	8	1644	8	1646	-	-	8	1648	-	-	-	-	-	-
Glass, thuringian	2	923 924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, vycor, high silica	-	-	5	1234	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, vycor 790	-	-	-	-	-	-	-	-	-	-	8	1633	-	-	-	-	-	-
Glass, vycor 791	-	-	-	-	-	-	-	-	-	-	8	1633	-	-	-	-	-	-
Glass, vycor 7900	-	-	5	1324	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, vycor-brand	2	926	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, vycor-brand No. 790	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1356	-
Glass, white plate	2	923 925	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, window	2	923 924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass, x-ray protection	2	924	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass-ceramic, BDQ 115	-	-	-	-	-	-	-	-	-	-	-	10	583	-	-	-	-	-
Glass fiber, blanket superfine	2	1116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glass fiber, insulation blanket	2	1117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glasses, miscellaneous	-	-	-	-	8	1643	8	1645	-	-	8	1647 1649	-	-	-	-	-	-
Glauberite	-	-	-	-	-	-	-	-	-	-	8	1694	-	-	-	-	-	-
Globar, silicon monocarbide, SiC	-	-	-	-	8	798	-	-	8	808 810	-	-	-	-	-	-	-	-
Glucinum	1	18	4	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glucinum sulfate	-	-	5	1179	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycerin	-	-	6	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycerol	3	209	6	230	-	-	-	-	-	-	-	10	589	-	-	-	-	-
Glycerol tribromohydrin	-	-	6s	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycerol trichlorohydrin	-	-	6s	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycol	-	-	6	192	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycol dibromide	-	-	6s	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycol dichloride	-	-	6s	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycyl alcohol	-	-	6	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Goethite, ore	-	-	-	-	-	-	8	1676	-	-	8	1661	-	-	-	-	-	-
Gold, Au	1	132	4	83	7	244	7	258	7	269	-	10	73	-	-	12	125	-



Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffusivity	Viscosity	Thermal Expansion		
				Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.						
	V.	Page		V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.
Graphite, 875 S	2	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite, 866 S	-	-	-	-	8	53	-	-	-	-	-	-	-	-	-	-
Graphite, 890 S	2	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite, 896 G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	123
Graphite, 942 S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	123
Graphite, 3474 D	-	5	9 11	8	33 46	8	66	-	-	-	-	-	-	-	13	24
Graphite, 3499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	27
Graphite, 7087	-	5	9 11	8	34 46	8	66	-	-	-	-	10	29	-	13	33
Graphite, 7100	-	-	-	8	34 47	-	-	-	-	-	-	-	-	-	-	-
Graphite, A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	37
Graphite, AAQ-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	130
Graphite, acheson	2	73	5	9 11	8	45	-	-	-	-	-	-	-	-	-	-
Graphite, AGA	2	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite, AGHT	2	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite, AGKSP	-	-	-	8	41 43 58	8	60 62 70 74	-	-	-	-	-	-	-	13	123
Graphite, AGOT	2	13	-	-	-	-	-	-	-	-	-	-	-	-	13	123
Graphite, AGOT-CSF-MTR	2	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite, AGOT-KC	2	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite, AGR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	123
Graphite, AGSR	2	57 58 63 64	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite, AGSX	2	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite, AGX	-	-	-	8	32 45	-	-	-	-	-	-	-	-	-	13	123
Graphite, artificial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	129
Graphite, ATJ	2	20	5	9 11	-	-	8	75	-	-	-	10	25	-	13	42
Graphite, ATJ, siliconized	-	-	-	9	1325 1328	-	-	-	-	-	-	-	-	-	-	-
Graphite, ATL	2	64	-	-	-	-	-	-	-	-	-	-	-	-	13	124
Graphite, ATL82	2	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite, AUC	2	63 64 65	-	8	32 45	-	-	-	-	-	-	-	-	-	-	-
Graphite, AWG	2	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite, AXM-5Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	75
Graphite, AXM-5Q1	-	-	-	-	-	-	-	-	-	-	-	10	37	-	-	-
Graphite, B-2 great lakes end cap	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	125
Graphite, B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	48
Graphite, boronated	2	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphite, British, reactor grade A	2	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emiss- ivity	Reflec- tivity	Absorp- tivity	Trans- missiv.			
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Graphite, British, reactor grade carbon	2 69 70	-	-	-	-	-	-	-	-
Graphite, brom-graphite	2 768	-	-	-	-	-	-	-	-
Graphite, brookhaven	2 26	-	-	-	-	-	-	-	-
Graphite, C	-	-	-	-	-	-	-	-	13 52
Graphite, CA	-	-	-	-	-	-	-	-	13 124
Graphite, Canadian natural	2 54	5 9 11	-	-	-	-	-	-	-
Graphite, carbon	-	-	-	-	-	-	-	-	13 24
Graphite, carbon resistor	2 73	-	-	-	-	-	-	-	-
Graphite, CB	-	-	-	-	-	-	-	-	13 124
Graphite, CBN	-	-	-	-	-	-	-	-	13 124
Graphite, CDG	2 65	-	-	-	-	-	-	-	-
Graphite, CEP	-	-	-	-	8 75	-	10 32 33 37	-	13 124
Graphite, CEQ	2 63 65	-	-	-	-	-	-	-	-
Graphite, ceylon	-	-	-	-	-	-	-	-	13 129
Graphite, ceylon natural	-	5 9	-	-	-	-	-	-	-
Graphite, CFW	2 67	-	-	-	-	-	-	-	13 56
Graphite, CFZ	2 67 71 72	-	-	-	-	-	-	-	13 59
Graphite, CS	2 54 55 56 64	5 9	-	-	-	-	10 29 36 37	-	-
Graphite, CS112	2 63	-	-	-	-	-	-	-	-
Graphite, CS312	2 63	-	-	-	-	-	-	-	13 124
Graphite, CSF	2 55	-	-	-	-	-	-	-	-
Graphite, CSF-MTR	2 63	-	-	-	-	-	-	-	-
Graphite, deposited carbon	2 32	-	-	-	-	-	-	-	-
Graphite, EH	-	-	-	-	-	-	-	-	13 125
Graphite, expanded pyrolytic	-	-	-	-	-	-	10 37	-	-
Graphite, experimental grade	-	-	-	-	-	-	-	-	13 64
Graphite, EY 9	2 69 70 71	-	-	-	-	-	-	-	13 125
Graphite, EY 9A	2 70	-	-	-	-	-	-	-	-
Graphite, fuel-filled	2 545 548 558	-	-	-	-	-	-	-	-
Graphite, G-5	2 60 61	-	-	-	-	-	-	-	-
Graphite, G-9	2 60 61	-	-	-	-	-	-	-	13 72 73 74
Graphite, GBE	2 54 55	-	8 32 45	8 66	8 76	-	-	-	13 68
Graphite, GBH	2 55	5 11	8 33 45	8 66	8 76	-	-	-	13 71

[illegible]





























Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties				Thermal Diffusivity		Viscosity		Thermal Expansion		
					Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	
Iron selenides:															
FeSe <sub>2</sub>	-	5	527	-	-	-	-	-	-	-	-	-	-	-	
Fe <sub>2</sub> Se <sub>4</sub>	-	5	536	-	-	-	-	-	-	-	-	-	-	-	
Fe-Se <sub>3</sub>	-	5	533	-	-	-	-	-	-	-	-	-	-	-	
Nonstoichiometric	-	5	530	-	-	-	-	-	-	-	-	-	-	-	
Iron silicate Fe <sub>2</sub> SiO <sub>4</sub>	-	5	1452	-	-	-	-	-	-	10	416	-	13	710	
Iron silicate + magnesium silicate, mixture	-	-	-	-	-	-	-	-	-	10	427	-	-	-	
Iron silicides:															
FeSi	-	5	577	-	-	-	-	-	-	10	468	-	13	1212	
FeSi <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	13	1212	
Fe <sub>2</sub> Si	-	5	583	-	-	-	-	-	-	-	-	-	13	1212	
Fe <sub>3</sub> Si <sub>2</sub>	-	5	580	-	-	-	-	-	-	-	-	-	-	-	
Iron sulfate heptahydrate, FeSO <sub>4</sub> ·7H <sub>2</sub> O	-	5	1200	-	-	-	-	-	-	-	-	-	-	-	
Iron sulfides:															
FeS	-	5	674	-	-	-	-	-	-	-	-	-	-	-	
FeS <sub>2</sub>	-	5	677	-	-	-	-	-	-	-	-	-	-	-	
Nonstoichiometric	-	5	671	-	-	-	-	-	-	-	-	-	-	-	
Iron telluride, FeTe <sub>2</sub>	-	5	729	-	-	-	-	-	-	-	-	-	-	-	
Iron telluride, nonstoichiometric	-	5	726	-	-	-	-	-	-	-	-	-	-	-	
Iron titanium oxide, FeO·TiO <sub>2</sub>	-	5	1455	-	-	-	-	-	-	-	-	-	-	-	
Iron vitriol	-	5	1200	-	-	-	-	-	-	-	-	-	-	-	
Iron-yttrium intermetallic compound, Fe <sub>17</sub> Y <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	12	576	
Intran 1, MgF <sub>2</sub>	-	-	-	8	951	8	953	8	956	8	960	-	-	13	1045
Intran 2, ZnS	-	-	-	8	1214 1216	8	1223	8	1225	8	1228	-	-	-	-
Intran 3, CaF <sub>2</sub>	-	-	-	-	-	-	8	930	8	933	-	-	13	1027	
Intran 4, ZnSe	-	-	-	8	1113 1115	8	1119	8	1122	8	1125	-	-	-	-
Intran 5, MgO	-	-	-	8	296	-	-	-	8	325	-	-	13	291	
Intran 6, CdTe	-	-	-	8	1240	8	1242	-	8	1247	-	-	13	1245	
Isoamyl acetate	-	6s	56	-	-	-	-	-	-	-	-	-	-	-	
Isoamyl alcohol	-	6s	61	-	-	-	-	-	-	-	-	-	-	-	
prî-Isoamyl alcohol	-	6s	61	-	-	-	-	-	-	-	-	-	-	-	
Isoamyl bromide	-	6s	5	-	-	-	-	-	-	-	-	-	-	-	
Isoamyl iodide	-	6s	55	-	-	-	-	-	-	-	-	-	-	-	
β-Isoamylene	-	6s	61	-	-	-	-	-	-	-	-	-	-	-	
Isotron 22	2	197	6	218	-	-	-	-	-	-	-	-	-	-	
Isotron 113	3	201	6	224	-	-	-	-	-	-	-	-	-	-	
Isotron 114	3	205	6	228 29	-	-	-	-	-	-	-	-	-	-	
Ivory	2	1076	-	-	-	-	-	-	-	-	-	-	-	-	
Ivory, african	2	1076	-	-	-	-	-	-	-	-	-	-	-	-	
Kaolin	-	-	-	8	1653	8	618 1665	-	-	-	-	-	-	-	



Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion		
				Emissivity		Reflectivity		Absorptivity		Transmissiv.								
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Lanthanum sulfides:																		
LaS	2	702	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1239	
La <sub>2</sub> S <sub>3</sub>	-	-	-	-	8	1232	-	-	-	-	-	-	-	-	-	13	1239	
Lanthanum telluride, LaTe	1	1304	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1270	
Lanthanum-tin intermetallic compound, LaSn <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	580 581 583	
Lead, Pb	1	175	4	113	7	335 337	-	7	339 341 343 345	-	10	102	-	-	-	12	178	
Lead, pyrometric standard	1	183 184	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lead alloys:																		
Pb + Ag	1	646	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pb + Bi	1	640	-	-	-	-	-	-	-	-	-	-	-	-	-	12	681	
Pb + Cd	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	689	
Pb + In	1	643	-	-	-	-	-	-	-	-	-	-	-	-	-	12	827	
Pb + Sb	1	637	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pb + Sn	1	652	4	363	7	948	-	-	-	-	-	-	-	-	-	12	872	
Pb + Sn, solder	-	-	4	446	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pb + Ti	1	649	-	-	-	-	-	-	-	-	-	-	-	-	-	12	876	
Pb + Sb + 3Xt	1	991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pb + Sb + 3Xt, SAE bearing alloy 12	1	991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lead aluminum oxide, PbO·Al <sub>2</sub> O <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	478	
Lead boron silicate, Pb <sub>3</sub> B <sub>2</sub> SiO <sub>10</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	711	
Lead bromide, PbBr <sub>2</sub>	-	-	-	-	-	-	-	-	-	8	745	-	-	-	-	13	806	
Lead carbonate	-	-	-	-	-	-	8	587	8	589	-	-	-	-	-	-	-	
Lead chloride, PbCl <sub>2</sub>	-	-	-	-	-	-	-	-	-	8	908	-	-	-	-	13	977	
Lead chloriodide, PbClI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1122	
Lead fluoride, PbF <sub>2</sub>	-	-	-	-	-	-	-	-	-	8	994	-	-	-	-	13	1034	
Lead fluorochloride, PbFCl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1013	
Lead germanium oxide, 2PbO·GeO <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	491	
Lead germanium telluride, PbGeTe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1271	
Lead glance	-	-	5	681	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lead hafnate	-	-	-	-	-	-	8	597	-	-	-	-	-	-	-	-	-	
Lead iodide, PbI <sub>2</sub>	-	-	5	497	-	-	-	-	-	8	1003	-	-	-	-	13	1122	
Lead iron tungsten oxide, 3PbO·Fe <sub>2</sub> O <sub>3</sub> ·WO <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	590	
Lead-lithium intermetallic compound, PbLi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	584	
Lead molybdenum oxide, PbO·MoO <sub>3</sub>	-	-	5	1458	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lead nitrate, Pb(NO <sub>3</sub> ) <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	671	
Lead oxide + silicon dioxide, mixture	2	359	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lead oxide + silicon dioxide + 3Xt, mixture	2	474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties				Thermal Diffusivity	Viscosity	Thermal Expansion
				Emis-sivity	Reflec-tivity	Absorp-tivity	Trans-missiv.			
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Lithium aluminum fluoride, $\text{Li}_3\text{AlF}_6$	-	5	947	-	-	-	-	-	-	-
Lithium aluminum oxide, $\text{LiAlO}_2$	-	5	1464	-	-	-	-	-	-	-
Lithium aluminum silicate, $\text{LiAlSiO}_4$	-	-	-	-	-	-	-	-	-	13 713
Lithium beryllium fluoride, $\text{Li}_2\text{BeF}_4$	-	5	950	-	-	-	-	-	-	-
Lithium borate	-	-	-	-	8 582	-	-	-	-	-
Lithium bromide, $\text{LiBr}$	-	-	-	-	-	-	-	-	-	13 836
Lithium carbonate, $\text{Li}_2\text{CO}_3$	-	5	1118	-	-	-	-	-	-	-
Lithium chloride, $\text{LiCl}$	-	5	835	-	-	-	-	-	-	13 979
Lithium deuteride, $\text{LiD}$	-	-	-	-	-	-	-	-	-	13 1079
Lithium fluoride, $\text{LiF}$	2 636	5 943	-	8 937 942	-	8 944	10 471	-	-	13 1036
Lithium fluoride + nickel fluoride, mixture	-	-	-	-	-	-	-	-	-	13 1075
Lithium fluoride + potassium fluoride + $\text{ZrF}_4$ , mixture	2 641	-	-	-	-	-	-	-	-	-
Lithium germanium oxides:										
$\text{Li}_2\text{O} \cdot \text{GeO}_2$	-	-	-	-	-	-	-	-	-	13 494
$\text{Li}_2\text{O} \cdot 7\text{GeO}_2$	-	-	-	-	-	-	-	-	-	13 494
$2\text{Li}_2\text{O} \cdot \text{GeO}_2$	-	-	-	-	-	-	-	-	-	13 494
$3\text{Li}_2\text{O} \cdot 2\text{GeO}_2$	-	-	-	-	-	-	-	-	-	13 494
$3\text{Li}_2\text{O} \cdot 8\text{GeO}_2$	-	-	-	-	-	-	-	-	-	13 494
Lithium hexafluoroaluminate	-	5 947	-	-	-	-	-	-	-	-
Lithium hydride, $\text{LiH}$	2 773	5 1036	-	-	-	-	-	-	-	13 1079
Lithium hydrogen fluoride, $\text{LiHF}_2$	-	5 953	-	-	-	-	-	-	-	-
Lithium hydrozincium sulfate, $\text{Li}(\text{N}_2\text{H}_5)\text{SO}_4$	-	-	-	-	-	-	-	-	-	13 734
Lithium iron oxide, $\text{Li}_2\text{O} \cdot \text{Fe}_2\text{O}_3$	-	5 1467	-	-	-	-	-	-	-	-
Lithium iron oxide, nonstoichiometric	-	5 1470	-	-	-	-	-	-	-	-
Lithium niobium oxide, $\text{Li}_2\text{O} \cdot \text{Nb}_2\text{O}_5$	-	-	-	8 598	-	-	-	-	-	13 526
Lithium oxide, $\text{Li}_2\text{O}$	2 157	5 134	-	-	-	-	-	-	-	-
Lithium silicates:										
$\text{Li}_2\text{Si}_2\text{O}_5$	-	-	-	-	-	-	-	-	-	13 713
$\text{Li}_4\text{SiO}_4$	-	-	-	-	-	-	-	-	-	13 713
$\text{Li} + \text{Na}$	1 655	-	-	-	-	-	-	-	-	-
$\text{Li} + \text{Na} + \text{ZrF}_4$	1 995	-	-	-	-	-	-	10 292	-	-
Lithium sulfate, $\text{Li}_2\text{SO}_4$	-	-	-	-	-	-	-	-	-	13 731
Lithium tantalum oxide, $\text{Li}_2\text{O} \cdot \text{Ta}_2\text{O}_5$	-	-	-	-	-	-	-	-	-	13 539
Lithium titanium oxide, $\text{Li}_2\text{O} \cdot \text{TiO}_2$	-	5 1473	-	-	-	-	-	-	-	-
Lithium yttrium fluoride	-	-	-	-	-	-	8 994	-	-	-
Lithium zinc iron oxide, nonstoichiometric	-	5 1476	-	-	-	-	-	-	-	-
Lithium zirconium silicate + strontium oxide + $\text{ZrF}_4$ , mixture	2 514	-	-	-	-	-	-	-	-	-
Lithopone	-	-	-	-	-	-	-	10 520	-	-
Lucalox	2 106	-	-	-	-	-	-	10 383	-	-
Lucite	-	-	-	-	8 1720	8 1722	8 1724	-	-	-

Substance Name	Thermal Conduc-tivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffu-sivity		Visco-sity		Thermal Expan-sion	
	V. Page		V. Page		Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.		V. Page		V. Page		V. Page	
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Lunar materials	-	-	-	-	-	-	8	1666	-	-	-	-	-	-	-	-	-	-
Lutetia	-	-	5	137	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lutetium, Lu	1	198	4	121	-	-	7	347	-	-	7	350	10	108	-	-	12	190
Lutetium boride, LuB <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	793
Lutetium deuteride, LuD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1083
Lutetium hydride, LuH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1083
Lutetium oxide, Lu <sub>2</sub> O <sub>3</sub>	-	-	5	137	8	286 288	-	-	-	-	-	-	-	-	-	-	13	285
Magnesia	2	158	5	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesio-ferrite, MO·Fe <sub>2</sub> O <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	513
Magnesio-wustite, MgO·2FeO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	510
Magnesium, Mg	1	202	4	124	7	353	7	356 358 360	7	364	7	367	10	109	-	-	12	194
Magnesium, anodized	-	-	-	-	9	1274	-	-	9	1275	-	-	-	-	-	-	-	-
Magnesium, L120	-	-	-	-	-	-	7	361 362	7	365	-	-	-	-	-	-	-	-
Magnesium alloys:																		
Mg + Ag	1	678	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	881
Mg + Al	1	658	-	-	-	-	7	950	-	-	-	-	-	-	-	-	12	646
Mg + Al, magnox A-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	649
Mg + Al, magnox C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	649
Mg + Ca	1	662	4	294	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mg + Ce	1	663	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mg + Cd	1	661	4	297	-	-	-	-	-	-	-	-	-	-	-	-	12	693
Mg + Cu	1	666	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	767
Mg + Mn	1	669	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	878
Mg + Ni	1	672	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	877
Mg + Si	1	675	4	369	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mg + Sn	1	679	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	884
Mg + Zn	1	680	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	888
Mg + Al + ΣX <sub>6</sub>	1	998	4	535	7	1327	7	1330	7	1334	-	-	10	293	-	-	12	1202
Mg + Al + ΣX <sub>6</sub> , anodized	-	-	-	-	-	-	9	1277	-	-	-	-	-	-	-	-	-	-
Mg + Al + ΣX <sub>6</sub> , AN-M-29	1	999	4	535	-	-	-	-	-	-	-	-	10	294	-	-	12	1204
Mg + Al + ΣX <sub>6</sub> , AZ31	-	-	-	-	7	1328	7	1332	7	1334	-	-	-	-	-	-	-	-
Mg + Al + ΣX <sub>6</sub> , AZ31A	1	999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1202 1204
Mg + Al + ΣX <sub>6</sub> , AZ31B	-	-	4	535	-	-	7	1332	-	-	-	-	-	-	-	-	-	-
Mg + Al + ΣX <sub>6</sub> , AZ31B, anodized	-	-	-	-	-	-	9	1277	-	-	-	-	-	-	-	-	-	-
Mg + Al + ΣX <sub>6</sub> , AZ-80	-	-	4	535	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mg + Al + ΣX <sub>6</sub> , elckton 2	1	999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mg + Ce + ΣX <sub>6</sub>	1	1001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mg + Co + ΣX <sub>6</sub>	1	1004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mg + Cu + ΣX <sub>6</sub>	1	1005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1207 1210 1211







[illegible]



Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Maple	2	1081	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marble	2	760 761	-	-	-	-	-	-	-	-	-	-	10	547	-	-	-	-
Marble, black	2	761	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marble, brown	2	761	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marble, brown, calcite	2	761	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marble, powder	2	760 761	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marble, white	2	761	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marble, white, Alabama	2	761	-	-	8	583	-	8	585	10	414	-	-	-	-	-	-	-
Marsh gas	3	218	6	244	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercuric oxide, HgO	-	-	5	157	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercuric selenide, HgSe	-	-	5	542	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury, Hg	1	212	4	131	-	-	-	-	-	-	-	10	112	-	-	12	206	-
Mercury alloy, Hg + Na	1	686	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury bromide, Hg <sub>2</sub> Br <sub>2</sub>	-	-	-	-	-	8	747	-	-	-	-	-	-	-	-	-	-	-
Mercury chlorides:																		
HgCl <sub>2</sub>	-	-	-	-	-	8	908	-	-	-	-	-	-	-	-	-	-	-
Hg <sub>2</sub> Cl <sub>2</sub>	-	-	-	-	-	8	908	-	-	-	-	-	-	-	-	-	-	-
Mercury iodides:																		
HgI <sub>2</sub>	-	-	-	-	-	8	1027	-	8	1029	-	-	-	-	-	13	1122	-
Hg <sub>2</sub> I <sub>2</sub>	-	-	-	-	-	8	1027	-	-	-	-	-	-	-	-	-	-	-
Mercury oxide, HgO	-	-	-	-	-	-	-	-	8	549	-	-	-	-	-	-	-	-
Mercury selenide, HgSe	1	1320	5	542	-	-	-	-	-	-	-	-	-	-	-	13	1192	-
Mercury sulfate, Hg <sub>2</sub> SO <sub>4</sub>	-	-	5	1203	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury sulfide, HgS	-	-	5	687	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury telluride, HgTe	1	1321	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1256	-
Mercury telluride + cadmium telluride, mixture	1	1407	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mesitylene	-	-	6s	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metal, rose	1	939	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methanal	-	-	6s	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	3	218	6	244	-	-	-	-	-	-	-	-	-	11	186	-	-	-
Methane, dideuterated	-	-	6s	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane, dideuterated ditritiated	-	-	6s	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane, ditritiated	-	-	6s	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane, monodeuterated	-	-	6s	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane, monodeuterated tritritiated	-	-	6s	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane, monotritiated	-	-	6s	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane, tetra-deuterated	-	-	6s	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane carboxylic acid	-	-	6s	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane-nitrogen, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	465	-	-	-
Methane-oxygen, mixture	-	-	-	-	-	-	-	-	-	-	-	-	-	11	474	-	-	-
Methane-propane, mixture	3	432	-	-	-	-	-	-	-	-	-	-	-	11	477	-	-	-

Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.			
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Methane-sulfur dioxide, mixture	-	-	-	-	-	-	-	11 529	-
Methanethiol	-	6s 59	-	-	-	-	-	-	-
Methanethiomethane	-	6s 69	-	-	-	-	-	-	-
Methanol	3 223	6 252	-	-	-	-	-	-	-
Methenyl tribromide	-	6s 5	-	-	-	-	-	-	-
Methoxymethane	-	6s 63	-	-	-	-	-	-	-
Methyl	-	6s 59	-	-	-	-	-	-	-
Methyl acetate	-	6s 59	-	-	-	-	-	-	-
Methylacetylene	-	6s 82	-	-	-	-	-	-	-
Methane, tetratritiated	-	6s 58	-	-	-	-	-	-	-
Methane, trideuterated	-	6s 59	-	-	-	-	-	-	-
Methane, trideuterated monotritiated	-	6s 59	-	-	-	-	-	-	-
Methane, tritritiated	-	6s 59	-	-	-	-	-	-	-
Methyl alcohol	3 223	6 252	-	-	-	-	-	11 192	-
Methyl aldehyde	-	6s 42	-	-	-	-	-	-	-
Methyl bromide	-	6s 5	-	-	-	-	-	-	-
Methyl chloride	3 227	6 257	-	-	-	-	-	11 194	-
Methyl chloride-sulfur dioxide, mixture	-	-	-	-	-	-	-	11 551	-
Methyl cyanide	-	6s 61	-	-	-	-	-	-	-
Methyl ethanoate	-	6s 59	-	-	-	-	-	-	-
Methyl ether	-	6s 63	-	-	-	-	-	-	-
Methyl ethyl ketone	-	6s 7	-	-	-	-	-	-	-
Methyl fluoride	-	6s 42	-	-	-	-	-	-	-
Methyl formate-propane, mixture	3 462	-	-	-	-	-	-	-	-
Methyl glycol	-	6s 76	-	-	-	-	-	-	-
Methyl iodide	-	6s 55	-	-	-	-	-	-	-
Methyl isobutyl ketone	-	6s 66	-	-	-	-	-	-	-
Methyl isocyanide	-	6s 64	-	-	-	-	-	-	-
Methyl isonitrile	-	6s 64	-	-	-	-	-	-	-
Methyl mercaptan	-	6s 59	-	-	-	-	-	-	-
Methyl oxide	-	6s 63	-	-	-	-	-	-	-
Methyl sulfide	-	6s 69	-	-	-	-	-	-	-
Methyl thioalcohol	-	6s 59	-	-	-	-	-	-	-
Methylamine	-	6s 59	-	-	-	-	-	-	-
Methylbenzene	-	6 285	-	-	-	-	-	-	-
m-Methylbenzoic acid	-	6s 91	-	-	-	-	-	-	-
o-Methylbenzoic acid	-	6s 91	-	-	-	-	-	-	-
p-Methylbenzoic acid	-	6s 91	-	-	-	-	-	-	-
2-Methylbenzoic acid	-	6s 91	-	-	-	-	-	-	-
3-Methylbenzoic acid	-	6s 91	-	-	-	-	-	-	-
4-Methylbenzoic acid	-	6s 91	-	-	-	-	-	-	-
1,6-Methylbivinyli	-	6s 56	-	-	-	-	-	-	-

Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.			
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
2-Methyl-1,3-butadiene	-	6s 56	-	-	-	-	-	-	-
3-Methyl-1,3-butadiene	-	6s 56	-	-	-	-	-	-	-
2-Methylbutane	-	6s 59	-	-	-	-	-	-	-
2-Methyl-2-butanol	-	6s 61	-	-	-	-	-	-	-
3-Methyl-1-butanol	-	6s 61	-	-	-	-	-	-	-
3-Methyl-1-butanol acetate	-	6s 56	-	-	-	-	-	-	-
2-Methyl-2-butene	-	6s 61	-	-	-	-	-	-	-
$\gamma$ -Methylbutyl ethanoate	-	6s 56	-	-	-	-	-	-	-
3-Methyl-1-butyne	-	6s 61	-	-	-	-	-	-	-
Methylcarbamine	-	6s 64	-	-	-	-	-	-	-
Methylchloroform	-	6s 91	-	-	-	-	-	-	-
Methylcyclohexane	-	6s 62	-	-	-	-	-	-	-
Methylcyclopentane	-	6s 62	-	-	-	-	-	-	-
Methyldipropylmethane	-	6s 64	-	-	-	-	-	-	-
$\alpha$ -Methylditan	-	6s 34	-	-	-	-	-	-	-
Methylene	-	6s 63	-	-	-	-	-	-	-
Methylene bromide	-	6s 26	-	-	-	-	-	-	-
Methylene chloride	-	6s 28	-	-	-	-	-	-	-
Methylene dichloride	-	6s 28	-	-	-	-	-	-	-
Methylene fluoride	-	6s 30	-	-	-	-	-	-	-
Methylene iodide	-	6s 30	-	-	-	-	-	-	-
Methylene oxide	-	6s 42	-	-	-	-	-	-	-
Methylethylene glycol	-	6s 76	-	-	-	-	-	-	-
<i>syn</i> -Methylethylethylene	-	6s 73	-	-	-	-	-	-	-
Methylfluoroform	-	6s 92	-	-	-	-	-	-	-
2-Methylfuran	-	6s 63	-	-	-	-	-	-	-
2-Methylheptane	-	6s 63	-	-	-	-	-	-	-
3-Methylheptane	-	6s 64	-	-	-	-	-	-	-
4-Methylheptane	-	6s 64	-	-	-	-	-	-	-
2-Methylhexane	-	6s 64	-	-	-	-	-	-	-
Methylhydrazine	-	6s 64	-	-	-	-	-	-	-
Methylhydrazine, MMH	-	6s 64	-	-	-	-	-	-	-
Methyldiene	-	6s 64	-	-	-	-	-	-	-
Methylmethane	-	6 174	-	-	-	-	-	-	-
2-Methylpentane	-	6s 64	-	-	-	-	-	-	-
2-Methyl-3-ethylpentane	-	6s 38	-	-	-	-	-	-	-
3-Methylpentane	-	6s 65	-	-	-	-	-	-	-
3-Methyl-3-ethylpentane	-	6s 38	-	-	-	-	-	-	-
4-Methyl-2-pentanone	-	6s 66	-	-	-	-	-	-	-
2-Methyl-2-phenylpropane	-	6s 11	-	-	-	-	-	-	-
2-Methyl-1-propanol	-	6s 67	-	-	-	-	-	-	-
2-Methyl-2-propanol	-	6s 67	-	-	-	-	-	-	-



Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.			
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Molybdenum carbides:									
MoC	-	5 436	-	-	-	-	-	-	13 935
Mo <sub>2</sub> C	2 579	5 436	8 850 852	-	-	-	-	-	13 854
Molybdenum disilicide, oxidized	-	-	-	-	-	9 1311	-	-	-
Molybdenum disilicide + molybdenum oxide, mixture	-	-	8 1473 1474	8 1476	-	-	-	-	-
Molybdenum disilicide + molybdenum oxide + silicon dioxide powder	-	-	8 1510 1511	8 1513	-	-	-	-	-
Molybdenum disilicide + silicon dioxide powder	-	-	8 1478 1479	8 1482	-	-	-	-	-
Molybdenum fluoride, MoF <sub>6</sub>	-	5 962	-	-	-	-	-	-	-
Molybdenum oxide + molybdenum silicide powder	-	-	8 1473 1474	8 1476	-	-	-	-	-
Molybdenum oxide + molybdenum disilicide powder	-	-	8 1510 1511	8 1513	-	-	-	-	-
Molybdenum oxide + nickel, cermet	-	-	-	8 1425	-	-	-	-	-
Molybdenum oxide + silicon dioxide powder	-	-	-	8 566	-	-	-	-	-
Molybdenum oxides:									
MoO <sub>2</sub>	-	5 160	-	-	-	-	-	-	-
MoO <sub>3</sub>	-	5 163	-	8 330	-	-	-	-	-
Mo <sub>2</sub> O <sub>5</sub>	-	-	-	-	-	-	-	-	13 311
Molybdenum silicides:									
MoSi <sub>2</sub>	1 1324	5 592	8 1148 1150 1152	8 1155	-	-	-	-	13 1198
MoSi <sub>2</sub> , oxidized	-	-	-	-	-	9 1311	-	-	-
MoSi <sub>3</sub>	-	-	-	-	-	-	-	-	13 1212
Mo <sub>5</sub> Si	-	5 595	8 1150	-	-	-	-	-	13 1212
Mo <sub>5</sub> Si <sub>3</sub>	-	-	8 1150	8 1482	-	-	-	-	13 1212
Molybdenum silicide + molybdenum oxide + silicon oxide powder	-	-	-	8 1510 1511	8 1513	-	-	-	-
Molybdenum silicide + silicon oxide, powder	-	-	8 1478 1479	-	-	-	-	-	-
Molybdenum silicide + zirconium carbide + SiC, mixture	-	-	-	-	-	-	-	-	13 790
Molybdenum, siliconized	-	-	9 1331 1333 1335 1337	9 1342	9 1345	-	-	-	-
Molybdenum sulfide, MoS <sub>2</sub>	-	5 690	-	8 1207	-	8 1210	-	-	13 1239
Molybdenum telluride, MoTe <sub>2</sub>	-	-	-	-	-	-	10 473	-	-
Molybdenum telluride + tungsten telluride, mixture	-	-	-	-	-	-	10 531	-	-
Monodeuteriomethane	-	6s 58	-	-	-	-	-	-	-
Mullite, aluminum silicate	2 254 934	-	8 1685 1687	8 618	-	-	10 412	-	-





[illegible]

[illegible]



Substance Name	Thermal	Specif.	Thermal Radiative Properties				Thermal	Visco-	Thermal
	Conduc-	Heat	Emiss-	Reflec-	Absorp-	Trans-	Diffu-	sity	Expans-
	tivity		sivity	tivity	tivity	missiv.	sivity		ion
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Nickel alloys: (continued)									
NI + Co + $\Sigma X_4$ , Refrallo 26	1 1029	-	-	-	-	-	-	-	-
NI + Co + $\Sigma X_4$ , René 41	1 1022	4 556	7 1353 1365 1366	7 1380 1382	-	-	-	-	12 1216 1222
NI + Co + $\Sigma X_4$ , Udiment 700	-	-	-	-	-	-	-	-	12 1229
NI + Cu + $\Sigma X_4$	1 1031	4 562	7 1423 1426	7 1430 1433	7 1436	-	10 303	-	12 1230
NI + Cu + $\Sigma X_4$ , Corronil	1 1032	-	-	-	-	-	-	-	-
NI + Cu + $\Sigma X_4$ , Monel	1 1032	4 562	7 1423 1428	7 1431	-	-	-	-	12 1230 1232
NI + Cu + $\Sigma X_4$ , Monel, 400	1 1032	4 562	7 1423 1428	7 1431	-	-	-	-	12 1232
NI + Cu + $\Sigma X_4$ , Monel, 505	1 1032	-	-	-	-	-	-	-	-
NI + Cu + $\Sigma X_4$ , Monel, 506	1 1032	-	-	-	-	-	-	-	-
NI + Cu + $\Sigma X_4$ , Monel, cast	1 1032	-	-	-	-	-	-	-	-
NI + Cu + $\Sigma X_4$ , Monel, H	1 1032	-	-	-	-	-	-	-	-
NI + Cu + $\Sigma X_4$ , Monel, K	1 1032	4 562	7 1428	7 1434	7 1437	-	10 304	-	12 1232
NI + Cu + $\Sigma X_4$ , Monel, K-500	1 1032	4 562	7 1428	7 1434	7 1437	-	-	-	-
NI + Cu + $\Sigma X_4$ , Monel, R	1 1032	-	-	-	-	-	-	-	-
NI + Cu + $\Sigma X_4$ , Monel, R-405	1 1032	-	-	-	-	-	-	-	-
NI + Cu + $\Sigma X_4$ , Monel, S	1 1032	-	-	-	-	-	-	-	12 1232 1233
NI + Cu + $\Sigma X_4$ , nickel bronze	1 1032	-	-	-	-	-	-	-	-
NI + Cu + $\Sigma X_4$ , Silicon monel	1 1032	-	-	-	-	-	-	-	-
NI + Fe + $\Sigma X_4$	1 1035	4 565	7 1439	-	-	-	10 305	-	12 1236
NI + Fe + $\Sigma X_4$ , contracid	1 1036	-	-	-	-	-	-	-	-
NI + Fe + $\Sigma X_4$ , contracid B 7M	1 1036	-	-	-	-	-	-	-	-
NI + Fe + $\Sigma X_4$ , Hastelloy A	1 1036	-	-	-	-	-	-	-	-
NI + Fe + $\Sigma X_4$ , HyMu-80	1 1036	-	-	-	-	-	-	-	-
NI + Fe + $\Sigma X_4$ , Incoloy 901	-	4 565	-	-	-	-	-	-	-
NI + Fe + $\Sigma X_4$ , Nilo 50	-	-	-	-	-	-	-	-	12 1238
NI + Mn + $\Sigma X_4$	1 1038	4 568	-	-	-	-	10 309	-	12 1241
NI + Mn + $\Sigma X_4$ , GRD	-	-	-	-	-	-	10 310	-	-
NI + Mn + $\Sigma X_4$ , Nickel 211	1 1039	-	-	-	-	-	-	-	-
NI + Mn + $\Sigma X_4$ , Nickel A	1 239 241 1029 1039	-	7 418 419 420 426 427 428 429	7 455	7 471	-	-	-	12 227 1243
NI + Mn + $\Sigma X_4$ , Nickel D	1 1039	-	-	-	-	-	-	-	-
NI + Mo + $\Sigma X_4$	1 1041	4 571	7 1442 1446 1450	7 1454	7 1457	-	-	-	12 1245
NI + Mo + $\Sigma X_4$ , Hastelloy B	1 1042	4 571	7 1448 1452	7 1455	7 1458	-	-	-	12 1248 1247
NI + Mo + $\Sigma X_4$ , Hastelloy C	1 1018	4 566	7 1448 1452	7 1455	7 1458	-	-	-	12 1248 1247

Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
				Emis-sivity	Reflec-tivity		Absorp-tivity		Trans-missiv.								
	V.	Page	V.		Page	V.	Page	V.		Page	V.	Page	V.	Page	V.	Page	V.
Nickel alloys: (continued)																	
Ni + Mo + ΣX <sub>i</sub> , Hastelloy N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1245 1247
Ni + Mo + ΣX <sub>i</sub> , Haynes alloy C	-	-	-	7	1444	-	-	-	-	-	-	-	-	-	-	-	-
Ni + Mo + ΣX <sub>i</sub> , Inor-b	1	1042	-	7	1444	-	-	-	-	-	-	-	-	-	-	-	-
Ni + Si + ΣX <sub>i</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1249
Ni + Si + ΣX <sub>i</sub> , grade A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1249
Ni + Ti + ΣX <sub>i</sub>	-	-	-	-	-	-	-	-	-	-	-	10	307	-	-	-	-
Ni + Ti + ΣX <sub>i</sub> , Permenickel	-	-	-	-	-	-	-	-	-	-	-	10	308	-	-	-	-
Ni + Al + Mn + ΣX <sub>i</sub> , alumei	1	1015 1039	4	568	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel-aluminum intermetallic compounds:																	
NiAl	-	-	-	8	1316 1318	8	1321	-	-	-	-	-	-	-	-	-	-
Ni <sub>3</sub> Al	-	-	-	8	1316 1318	8	1321	-	-	-	-	-	-	-	-	-	-
Nickel aluminum oxide, NiO·Al <sub>2</sub> O <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	484
Nickel antimonide, NiSb	1	1327	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel-antimony intermetallic compound, NiSb	1	1327	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel carbonate, NiCO <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	647
Nickel chloride, NiCl <sub>2</sub>	-	5	863	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel chloride hexahydrate, NiCl <sub>2</sub> ·6H <sub>2</sub> O	-	5	866	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel fluoride, NiF <sub>2</sub>	-	5	973	-	-	-	-	-	-	-	-	-	-	-	-	13	1052
Nickel fluosilicate hexahydrate (A)	-	5	966	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel fluosilicate hexahydrate (B)	-	5	970	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel iron oxide, NiO·Fe <sub>2</sub> O <sub>3</sub>	-	5	1530	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel iron oxide, nonstoichiometric	-	5	1533	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel L	1	238 239	-	-	-	-	-	-	-	-	-	-	-	-	-	12	227
Nickel-niobium intermetallic compound, Ni <sub>3</sub> Nb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	596
Nickel O	1	239	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NiO + Al <sub>2</sub> O <sub>3</sub> powders	-	-	-	8	556	-	-	-	-	-	-	-	-	-	-	-	-
Nickel oxide + nickel aluminum compound + ΣX <sub>i</sub> , cermet	-	-	-	8	1393 1394	8	1398	-	-	-	-	-	-	-	-	-	-
Nickel oxides:																	
NiO	2	171	5	172	8	337 339	8	342	-	-	-	-	-	-	-	13	319
Ni <sub>2</sub> O <sub>3</sub>	-	-	-	-	-	8	342	-	-	-	-	-	-	-	-	-	-
Nickel S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	228
Nickel selenide, NiSe <sub>2</sub>	-	5	549	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel selenide, nonstoichiometric	-	5	545	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel silicate, Ni <sub>3</sub> SiO <sub>4</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	727

Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties				Thermal Diffusivity		Viscosity		Thermal Expansion		
					Emissivity		Reflectivity		Absorptivity		Transmissiv.				
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	
Nickel silicides:															
Ni <sub>2</sub> Si	-	-	-	-	-	-	-	-	-	-	-	-	13	1212	
NiSi <sub>2</sub>	-	-	-	-	8	1173	-	-	-	-	-	-	-	-	
Nickel sulfate hexahydrate	-	-	5	1206	-	-	-	-	-	-	-	-	-	-	
Nickel sulfides:															
NiS	-	-	5	693	-	-	-	-	-	-	-	-	-	-	
Ni <sub>3</sub> S <sub>2</sub>	2	705	5	696	-	-	-	-	-	-	-	-	-	-	
Nickel telluride, NiTe <sub>2</sub>	-	-	5	738	-	-	-	-	-	-	-	-	-	-	
Nickel telluride, nonstoichiometric	-	-	5	735	-	-	-	-	-	-	-	-	-	-	
Nickel + titanium boride, cermet	-	-	-	-	-	-	8	1435	-	-	-	-	-	-	
Nickel-titanium intermetallic compound, NiTi	-	-	-	-	-	-	-	-	-	-	-	-	12	597	
Nickel + titanium nickel compound, mixture	1	1436	-	-	-	-	-	-	-	-	-	-	-	-	
Nickel titanium oxide, NiO-TiO <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	13	569	
Nickel-yttrium intermetallic compound, Ni <sub>2</sub> Y	-	-	-	-	-	-	-	-	-	-	-	-	12	598	
Nickel zinc ferrate, NiZnFe <sub>2</sub> O <sub>4</sub>	2	298	-	-	-	-	-	-	-	-	-	-	-	-	
Nickel zinc ferrite	-	-	5	1536	-	-	-	-	-	-	-	-	-	-	
Nickel zinc iron oxide, nonstoichiometric	-	-	5	1536	-	-	-	-	-	-	-	-	-	-	
Nickelous oxide	-	-	5	172	-	-	-	-	-	-	-	-	-	-	
NiO-Al <sub>2</sub> O <sub>3</sub> , ZnO	2	243	-	-	-	-	-	-	-	-	-	-	-	-	
Niobium, Nb	1	245	4	153	7	474 480 482 486	7	492	7	497	-	10	125	12	236
Niobium alloys:															
Nb + Mo	-	-	-	-	-	-	-	-	-	-	-	-	12	900	
Nb + Re	-	-	-	-	-	-	-	-	-	-	-	-	12	949	
Nb + Ta	-	-	-	-	-	-	-	-	-	-	10	251	-	-	
Nb + U	1	713	-	-	-	-	-	-	-	-	-	-	12	954	
Nb + V	-	-	-	-	-	-	-	-	-	-	-	-	12	955	
Nb + W	-	-	-	-	7	981 984	-	-	-	-	-	-	-	-	
Nb + Zr	1	716	4	422	7	988 992 994	-	-	-	-	-	-	12	958	
Nb + Fe + EX <sub>4</sub>	-	-	4	574	-	-	-	-	-	-	-	-	-	-	
Nb + Fe + EX <sub>4</sub> , Russian, ferroniobium	-	-	4	574	-	-	-	-	-	-	-	-	-	-	
Nb + Mo + EX <sub>4</sub>	1	1046	4	577	7	1460	-	-	-	-	10	312	-	12	1250
Nb + Ta + EX <sub>4</sub>	1	1049	4	580	7	1463 1466	-	-	-	-	10	314	-	12	1253
Nb + Ti + EX <sub>4</sub>	1	1052	4	583	-	-	-	-	-	-	10	316	-	12	1257
Nb + W + EX <sub>4</sub>	1	1055	4	586	7	1469	-	-	-	-	10	318	-	12	1259
Niobium-aluminum intermetallic compound, NbAl <sub>3</sub>	-	-	-	-	-	-	8	1322	-	-	-	-	-	-	
Niobium beryllide, NbBe <sub>12</sub>	-	-	5	319	-	-	-	-	-	-	-	-	-	-	
Niobium boride, NbB <sub>2</sub>	-	-	5	365	8	697 699 701	-	-	-	-	-	-	13	767	

Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion
				Emissivity		Reflectivity		Absorptivity		Transmissiv.						
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Niobium boride, nonstoichiometric	-	5	361	-	-	-	-	-	-	-	-	-	-	-	-	-
Niobium carbides:																
NbC	2	582	5	442	8	785 787 789	-	-	-	-	10	474	-	-	13	858
Nb <sub>2</sub> C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	936
Nonstoichiometric	-	5	439	-	-	-	-	-	-	-	-	-	-	-	-	-
Niobium fluoride, NbF <sub>5</sub>	-	5	976	-	-	-	-	-	-	-	-	-	-	-	-	-
Niobium nitrides:																
NbN	-	-	-	8	1087	-	-	-	-	-	-	-	-	-	13	1162
Nb <sub>2</sub> N	-	-	-	8	1087	-	-	-	-	-	-	-	-	-	-	-
Niobium oxides:																
NbO	-	5	175	-	-	-	-	-	-	-	-	-	-	-	-	-
NbO <sub>2</sub>	-	5	178	-	-	-	-	-	-	-	-	-	-	-	-	-
Nb <sub>2</sub> O <sub>5</sub>	-	5	181	8	347	8	349	-	-	-	-	-	-	-	13	323
Niobium phosphate, NbPO <sub>4</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	690
Niobium silicides:																
NbSi <sub>3</sub>	-	-	-	8	1173	-	-	-	-	-	-	-	-	-	13	1213
Nb <sub>3</sub> Si <sub>8</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1213
Niobium tantalum oxide, 2Nb <sub>2</sub> O <sub>5</sub> ·Ta <sub>2</sub> O <sub>5</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	543
Niobium-tin intermetallic compound, Nb <sub>3</sub> Sn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	601
Niobium vanadium oxide, Nb <sub>2</sub> O <sub>5</sub> ·V <sub>2</sub> O <sub>5</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	596
Niton	3	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitric oxide, NO	3	106	6	83	-	-	-	-	-	-	-	-	11	82	-	-
Nitric oxide-nitrogen, mixture	-	-	-	-	-	-	-	-	-	-	-	-	11	495	-	-
Nitric oxide-nitrous oxide, mixture	-	-	-	-	-	-	-	-	-	-	-	-	11	492	-	-
m-Nitroaniline	-	6s	69	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Nitroaniline	-	6s	69	-	-	-	-	-	-	-	-	-	-	-	-	-
p-Nitroaniline	-	6s	69	-	-	-	-	-	-	-	-	-	-	-	-	-
m-Nitrobenzoic acid	-	6s	69	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Nitrobenzoic acid	-	6s	69	-	-	-	-	-	-	-	-	-	-	-	-	-
p-Nitrobenzoic acid	-	6s	69	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzol	-	6s	69	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrocarbol	-	6s	69	-	-	-	-	-	-	-	-	-	-	-	-	-
m-Nitrodraeylic acid	-	6s	69	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Nitrodraeylic acid	-	6s	69	-	-	-	-	-	-	-	-	-	-	-	-	-
p-Nitrodraeylic acid	-	6s	69	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, N <sub>2</sub>	3	64	6	39	-	-	-	-	-	-	10	128	11	48	-	-
Nitrogen, monatomic	-	6s	69	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen oxides:																
NO <sub>2</sub>	3	108	6	90	-	-	-	-	-	-	-	-	11	85	-	-
N <sub>2</sub> O	3	114	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen-oxygen, mixture	3	434	-	-	-	-	-	-	-	-	-	-	11	497	-	-





Substance Name	Thermal Conduc-tivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffu-sivity		Visco-sity		Thermal Expan-sion	
					Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Oxyethylene	-		6s	37	-		-		-		-		-		-		-	
Oxygen, O <sub>2</sub>	3	76	6	48	-		-		-		-		-		11	56	-	
Oxygen, monatomic	-		6s	70	-		-		-		-		-		-		-	
Oxygen + xenon, mixture	3	379	-		-		-		-		-		-		-		-	
Oxygen fluoride	-		6s	71	-		-		-		-		-		-		-	
Oxymethylene	-		6s	42	-		-		-		-		-		-		-	
Oxyphenic acid	-		6s	83	-		-		-		-		-		-		-	
Packed beds, nonmetallic	-		-		-		-		-		-		10	562	-		-	
Paint, AISI 99 grey	-		-		-		-		9	485	9	486	-		-		-	
Paint, black Boysen no. 11	-		-		-		9	487	-		-		-		-		-	
Paint, black velvet, 3M	-		-		9	533 535 536	9	538	9	540	-		-		-		-	
Paint, Channel black	-		-		-		-		-		-		10	22 35	-		-	
Paint, Cat-A-Lac white	-		-		9	491	-		9	492 493	-		-		-		-	
Paint, Cat-A-Lac black	-		-		9	82 84	9	86	9	89	-		-		-		-	
Paint, CM-145 Al <sub>2</sub> O <sub>3</sub>	-		-		-		9	33	9	42	-		-		-		-	
Paint, CM-146 TiO <sub>2</sub>	-		-		-		-		9	274	-		-		-		-	
Paint, CM-147 ZnO	-		-		-		-		9	378	-		-		-		-	
Paint, Dulite 1015	-		-		9	496	-		-		-		-		-		-	
Paint, Dulite II	-		-		9	496	-		-		-		-		-		-	
Paint, Dutch Boy 46H 47	-		-		9	499	9	500	-		-		-		-		-	
Paint, Eastman white reflecting	-		-		-		9	62	-		-		-		-		-	
Paints, Fuller:	-		-		-		-		-		-		-		-		-	
D-70-6342	-		-		9	502	-		-		-		-		-		-	
Flat black decorat	-		-		-		9	504	-		-		-		-		-	
Flat black silicone	-		-		9	81	-		9	89	-		-		-		-	
Harvard gray No. 2946	-		-		-		9	504	-		-		-		-		-	
Light brown No. 2909	-		-		-		9	504	-		-		-		-		-	
Mariposa blue decorat No. 2889	-		-		-		9	504	-		-		-		-		-	
TL-8606, No. 43	-		-		-		9	504	-		-		-		-		-	
TL-9465 No. 45	-		-		-		9	504	-		-		-		-		-	
Velvet black No. 1518	-		-		-		9	504	-		-		-		-		-	
No. 171-A-152	-		-		9	3	-		9	21	-		-		-		-	
No. 171-W-560	-		-		9	501	-		9	507	-		-		-		-	
No. 172-A-1	-		-		-		9	13	-		-		-		-		-	
No. 517-W-1	-		-		9	212	-		9	256 263	-		-		-		-	
No. 517-W-7	-		-		9	211	9	227	-		-		-		-		-	
Paint, Glasurit white epoxy	-		-		-		-		9	508	-		-		-		-	



[illegible]

Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties				Thermal Diffusivity		Viscosity		Thermal Expansion					
					Emissivity		Reflectivity		Absorptivity		Transmissiv.		Thermal Diffusivity		Viscosity		Thermal Expansion	
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Pentadecane		-	6s	72		-		-		-		-		-		-		-
n-Pentane	3	236	6	272		-		-		-		-		-	11	206		-
tert-Pentanol		-	6s	61		-		-		-		-		-		-		-
1-Pentanol		-	6s	72		-		-		-		-		-		-		-
3-Pentanol		-	6s	72		-		-		-		-		-		-		-
3-Pentanone		-	6s	72		-		-		-		-		-		-		-
3-Pentanone, metacetone		-	6s	72		-		-		-		-		-		-		-
1-Pentene		-	6s	73		-		-		-		-		-		-		-
2-Pentene		-	6s	73		-		-		-		-		-		-		-
1-Pentine		-	6s	73		-		-		-		-		-		-		-
2-Pentine		-	6s	73		-		-		-		-		-		-		-
Pentylene		-	6s	73		-		-		-		-		-		-		-
1-Pentyne		-	6s	73		-		-		-		-		-		-		-
2-Pentyne		-	6s	73		-		-		-		-		-		-		-
Perchloroethylene		-	6s	90		-		-		-		-		-		-		-
Perchloromethane		-	6	159		-		-		-		-		-		-		-
Perchlorovinyl		-	6s	90		-		-		-		-		-		-		-
Perfluoroethane		-	6s	44		-		-		-		-		-		-		-
Periclase	2	160		-		-		-		-		-		-		-		-
Perlite	2	827		-		-		-		-		-		-		-		-
Perovskite fluorides		-		-		-	8	976 980 984 988		-	8	978 982 986 990		-		-		-
Peroxide		-	6s	49		-		-		-		-		-		-		-
Petalite	2	935		-		-		-		-		-		-		-		-
Phenanthren	2	1004		-		-		-		-		-		-		-		-
Phene, hex-deuterated		-	6s	2		-		-		-		-		-		-		-
Phenol-formaldehyde plastic, reinforced		-		-		-		-		-		-	10	57		-		-
Phenoxybenzene		-	6s	73		-		-		-		-		-		-		-
Phenyl amine		-	6s	1		-		-		-		-		-		-		-
Phenyl bromide		-	6s	4		-		-		-		-		-		-		-
1-Phenyl butane		-	6s	11		-		-		-		-		-		-		-
Phenyl carbinol		-	6s	2		-		-		-		-		-		-		-
Phenyl chloride		-	6s	21		-		-		-		-		-		-		-
Phenyl ethane		-	6s	35		-		-		-		-		-		-		-
Phenyl ether	2	990	6s	73		-		-		-		-		-		-		-
Phenyl ethylene		-	6s	84		-		-		-		-		-		-		-
Phenyl fluoride		-	6s	41		-		-		-		-		-		-		-
Phenyl formic acid		-	6s	2		-		-		-		-		-		-		-
Phenyl iodide		-	6s	55		-		-		-		-		-		-		-
Phenyl methane		-	6	285		-		-		-		-		-		-		-
1-Phenyl propane		-	6s	80		-		-		-		-		-		-		-
2-Phenyl propane		-	6s	22		-		-		-		-		-		-		-





[illegible]



Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion		
				Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.								
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Polymethacrylate	-	-	-	-	-	-	-	-	-	-	10	601	-	-	-	-	-	-
Poly(2-methoxyethyl methacrylate)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1464	
Poly(methyl acrylate)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1466	
Poly(2-methyl 1,3-butadiene 2-methyl propene)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1468	
Poly(methyl methacrylate)	2	960	-	-	-	8	1719	8	1721	8	1723	10	602	-	-	13	1470	
Poly(methyl methacrylate), AN-P-44A	2	961	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Poly(methyl methacrylate), Perspex	2	961	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Poly(methyl pentene)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1475	
Poly(2-methyl 5-vinyl pyridine-acrylonitrile butadiene)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1476	
Polymethylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1477	
Polyoxymethylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1478	
Poly(n-octyl methacrylate)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1482	
Poly(n-propyl methacrylate)	2	101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Polypropylene	-	-	-	-	-	-	-	-	-	-	-	10	604	-	-	13	1486	
Poly(pyromellitimide)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1462	
Polystyrene	-	-	-	-	-	8	1725	-	-	8	1728	10	605	-	-	13	1489	
Polystyrene, colloidal aggregate	2	965	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Polytetraethylene glycol dimethacrylate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1436	
Polytetrafluoroethylene	2	967	-	-	8	1730	8	1732	8	1734	8	1736	10	608	-	13	1443	
Polytetrafluoroethylene, Halon G-80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1445	
Polytetrafluoroethylene, stretched PTFE, film	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1446	
Polythene, PM-1, vinyl polymer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1429	
Poly(triallyl citrate)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1392	
Polytrifluorochloroethylene	2	970	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1442	
Polytrifluorochloroethylene, Kel-F	2	970	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Polytrifluoroethylene	-	-	-	-	-	-	-	-	-	-	-	10	611	-	-	-	-	
Polyurethane	2	982	-	-	-	-	-	-	-	-	-	10	612	-	-	13	1494	
Polyvinyl chloride	2	953	-	-	-	8	1742	-	-	8	1746	10	613	-	-	-	-	
Poly(vinyl cyclohexene dioxide)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1496	
Poly(vinyl toluene)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1497	
Polyvinylidene chloride	-	-	-	-	-	-	-	-	-	-	8	1746	-	-	-	-	-	
Pollucite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	709	
Polonium, Po	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	270	
Porcelain, 576	2	937	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Porcelain, alumina	2	937	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Porcelain, electrical	2	937	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Porcelain, high zircon	2	937	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Porcelain, magnesium titanate	2	937	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Porcelain, wet process	2	937	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Poroloy	-	-	-	-	7	1226	-	-	7	1303	-	-	-	-	-	-	-	
Potassium, K	1	274	4	171	-	-	-	-	-	-	-	10	144	-	-	12	271	





Substance Name	Thermal Conduc-tivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffu-sivity		Visco-sity		Thermal Expan-sion	
					Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
sec-Propyl alcohol	-	-	6s	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propyl benzene	-	-	6s	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propyl bromide	-	-	6s	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propyl carbinol	-	-	6s	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propyl chloride	-	-	6s	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propyl ethanoate	-	-	6s	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propyl ether	-	-	6s	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propyl ethylene	-	-	6s	73	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	213	-	-
Propylene bromide	-	-	6s	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylene chloride	-	-	6s	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylene dibromide	-	-	6s	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylene dichloride	-	-	6s	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylene glycol	-	-	6s	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propyne	-	-	6s	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protactinium, Pa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	277
Protenstatite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	717
Prune juice	-	-	-	-	-	-	-	-	-	-	-	-	10	640	-	-	-	-
Prussic acid	-	-	6s	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prussite	-	-	6s	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudobutylene	-	-	6s	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-Pseudobutylene	-	-	6s	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-Pseudobutylene	-	-	6s	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocumene	-	-	6s	93	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocumol	-	-	6s	93	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrex 7740, borosilicate glass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1356
Pyridine	-	-	6s	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyroacetic acid	3	129	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyroacetic ether	-	-	6	113	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrocatechin	-	-	6s	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrocatechnic acid	-	-	6s	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrocatechol	-	-	6s	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyroceram	-	-	5	1237	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyroceram 9606	2	940	5	1237	8	1595 1597 1599 1601	8	1603	8	1606	-	-	10	582 583	-	-	-	-
Pyroceram 9608	-	-	5	1237	8	1595 1597 1599 1601	8	1603	8	1606	8	1608	10	582	-	-	-	-
Pyroceram brand glass-ceramic	2	939	-	-	-	-	-	-	-	-	-	-	10	582 583	-	-	-	-
Pyroceram ceramics	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1267
Pyrryliene	-	-	6s	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Quartz	2	174	5	207	-	-	-	-	-	-	-	-	10	397	-	-	13	262

Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emissivity		Reflectivity		Absorptivity		Transmissivity							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Quartz, crystal	-	-	5	207	8	371 372	8	374 385 386	8	389	8	391	-	-	-	-	-	-
Quartz, fiber Dyna	2	1144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Quartz, fused	-	-	-	-	8	403 405	8	409 413	8	415	8	417 426	-	-	-	-	13	360
Quartz, fused, G.E. 106	-	-	-	-	-	-	-	-	-	-	8	421	-	-	-	-	-	-
Quartz glass	2	187 188 923 924	5	202	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Quartz sand	2	834 835 836 837	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Quick silver	1	212	4	131	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Quinol	-	-	6s	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Quinone	-	-	6s	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Radium	-	-	-	-	-	-	-	-	-	-	-	-	10	148	-	-	-	-
Radon	3	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rare earth boride	-	-	-	-	8	722	-	-	-	-	8	726	-	-	-	-	-	-
Reflector plate, Alcoa No. 2	-	-	-	-	7	4 5	-	-	7	42 43	-	-	-	-	-	-	-	-
Refractories, aluminosilicate	-	-	-	-	-	-	-	-	-	-	-	-	10	564	-	-	-	-
Refractory materials	-	-	-	-	-	-	-	-	-	-	-	-	10	563	-	-	-	-
Refrax	2	586	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigerants:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R-10, carbon tetrachloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	129	-	-
R-11, trichlorofluoromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	220	-	-
R-12, dichlorodifluoromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	150	-	-
R-13, chlorotrifluoromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	145	-	-
R-13B1, bromotrifluoromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	104	-	-
R-14, carbon tetrafluoride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	131	-	-
R-20, chloroform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	138	-	-
R-21, dichlorofluoromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	155	-	-
R-22, chlorodifluoromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	133	-	-
R-23, trifluoromethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	230	-	-
R-40, methyl chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	194	-	-
R-50, methane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	186	-	-
R-113, trichlorotrifluoroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	225	-	-
R-114, dichlorotetrafluoroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	160	-	-
R-115, chloropentafluoroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	140	-	-
R-152A, 1,1-difluoroethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	165	-	-
R-170, ethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	167	-	-
R-290, propane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	208	-	-
R-C318, octafluorocyclobutane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	199	-	-
R-500, R-12-R-152A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	553	-	-

Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emissivity		Reflectivity		Absorptivity		Transmissivity							
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<b>Refrigerants:</b> (continued)																		
R-502, R-12-R-115	-	-	-	-	-	-	-	-	-	-	-	-	-	11	558	-	-	-
R-503, R-13-R-23	-	-	-	-	-	-	-	-	-	-	-	-	-	11	563	-	-	-
R-504, CH <sub>3</sub> F <sub>3</sub> + R-115	-	-	-	-	-	-	-	-	-	-	-	-	-	11	565	-	-	-
R-600, n-butane	-	-	-	-	-	-	-	-	-	-	-	-	-	11	114	-	-	-
R-600A, i-butane	-	-	-	-	-	-	-	-	-	-	-	-	-	11	109	-	-	-
R-610, ethyl ether	-	-	-	-	-	-	-	-	-	-	-	-	-	11	180	-	-	-
R-702, hydrogen	-	-	-	-	-	-	-	-	-	-	-	-	-	11	24	-	-	-
R-704, helium	-	-	-	-	-	-	-	-	-	-	-	-	-	11	18	-	-	-
R-704A, deuterium	-	-	-	-	-	-	-	-	-	-	-	-	-	11	13	-	-	-
R-717, ammonia	-	-	-	-	-	-	-	-	-	-	-	-	-	11	68	-	-	-
R-718, water	-	-	-	-	-	-	-	-	-	-	-	-	-	11	94	-	-	-
R-720, neon	-	-	-	-	-	-	-	-	-	-	-	-	-	11	41	-	-	-
R-728, nitrogen	-	-	-	-	-	-	-	-	-	-	-	-	-	11	48	-	-	-
R-728A, carbon monoxide	-	-	-	-	-	-	-	-	-	-	-	-	-	11	125	-	-	-
R-729, air	-	-	-	-	-	-	-	-	-	-	-	-	-	11	608	-	-	-
R-730, nitric oxide	-	-	-	-	-	-	-	-	-	-	-	-	-	11	82	-	-	-
R-732, oxygen	-	-	-	-	-	-	-	-	-	-	-	-	-	11	56	-	-	-
R-734, hydrogen sulfide	-	-	-	-	-	-	-	-	-	-	-	-	-	11	80	-	-	-
R-736, hydrogen chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	11	76	-	-	-
R-738, fluorine	-	-	-	-	-	-	-	-	-	-	-	-	-	11	16	-	-	-
R-740, argon	-	-	-	-	-	-	-	-	-	-	-	-	-	11	2	-	-	-
R-744, carbon dioxide	-	-	-	-	-	-	-	-	-	-	-	-	-	11	119	-	-	-
R-744A, nitrous oxide	-	-	-	-	-	-	-	-	-	-	-	-	-	11	87	-	-	-
R-746, nitrogen peroxide	-	-	-	-	-	-	-	-	-	-	-	-	-	11	85	-	-	-
R-764, sulfur dioxide	-	-	-	-	-	-	-	-	-	-	-	-	-	11	91	-	-	-
R-768, boron trifluoride	-	-	-	-	-	-	-	-	-	-	-	-	-	11	74	-	-	-
R-771, chlorine	-	-	-	-	-	-	-	-	-	-	-	-	-	11	11	-	-	-
R-784, krypton	-	-	-	-	-	-	-	-	-	-	-	-	-	11	37	-	-	-
R-1150, ethylene	-	-	-	-	-	-	-	-	-	-	-	-	-	11	174	-	-	-
R-1270, propylene	-	-	-	-	-	-	-	-	-	-	-	-	-	11	213	-	-	-
Resin	-	-	-	-	-	-	-	-	-	-	-	-	10	614	-	-	-	-
Resin, epoxy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1502	-
Resin, polyester	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1511	-
Resin, phenoxy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1512	-
Resin, phenolic	-	-	-	-	-	-	-	-	-	-	-	-	10	615	-	13	1509	-
Resin, vinyl	-	-	-	-	-	-	8	1741	8	1743	8	1745	-	-	-	-	-	-
Resin cured butyl pseudo base	2	983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Resorcin	-	-	6s	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Resorcinol	-	-	6s	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhenium, Re	1	288	4	181	7	559 562 565 568	-	-	-	-	-	-	10	149	-	12	280	-

Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emissivity		Reflectivity		Absorptivity		Transmissiv.							
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Rhenium arsenide, Re <sub>3</sub> As <sub>7</sub>	1	1330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhenium chloride, ReCl <sub>3</sub>	-	-	5	878	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhenium-germanium intermetallic compounds:																		
RhGe	1	1331	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RhGe <sub>2</sub>	1	1331	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhenium oxide, ReO <sub>3</sub>	-	-	-	-	-	-	8	546	-	-	-	-	-	-	-	-	-	-
Rhenium selenide, ReSe <sub>2</sub>	1	1332	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhenium silicides:																		
ReSi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1213
ReSi <sub>2</sub>	-	-	-	-	8	1173	-	-	-	-	-	-	-	-	-	-	13	1213
Rhodium, Rh	1	292	4	184	7	571 573 576 579	7	581 584	7	587 589	-	10	152	-	-	12	285	-
Rhodium alloys:																		
Rh + Fe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	864	-
Rh + Mo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	904	-
Rh + Pt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	967	-
Rhyolite tuff	-	-	-	-	-	-	8	1682	-	-	-	-	-	-	-	-	-	-
Rock	2	828	-	-	-	-	8	1680	-	-	-	-	-	-	-	-	-	-
Rock, minerals	-	-	-	-	-	-	-	-	-	-	-	10	545	-	-	-	-	-
Rock, Winchester crushed trap	2	829 830	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rock cork	2	1146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rock salt, natural	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1003	-
Rock salt, synthetic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1003	-
Rock wool	2	1148	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rose metal	1	939	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, acrylate	2	982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, acrylic	2	982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, adiprene	2	982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, butaprene E	2	982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, carboxy nitrile	2	982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, chloroprene	2	983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, dibenzo GWF-cured butyl pseudo balsa	2	983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, Ebonite	2	971	-	-	-	-	-	-	-	-	-	10	617	-	-	-	-	-
Rubber, elastomer	2	974	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, epoxy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1520	-
Rubber, EPR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1520	-
Rubber, foam buna-N	2	981	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, halveg elastomer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1520	-
Rubber, hevea	2	983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, Hycar 4021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1423	-

Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
				Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.
Rubber, hypalon 5-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1434
Rubber, hypalon S2	2	983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, Kel-F 3700	2	983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, methacrylate	2	983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, miscellaneous polymer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1520
Rubber, neoprene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1514
Rubber, nitrile	2	982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, polysulfide	2	982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, PR 19-10	-	-	-	-	-	8	1740	-	-	-	-	-	-	-	-	-	-
Rubber, RTV-77	-	-	-	-	-	8	1740	-	-	-	-	-	-	-	-	-	-
Rubber, rubatex R203-H	2	981	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, rubatex	2	981	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, silicone	2	983	-	-	-	-	-	-	-	-	10	617	-	-	-	13	1517
Rubber, silicone silastic 160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1518
Rubber, silicone silastic 400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1518
Rubber, silicone silastic X30028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1518
Rubber, styrene	2	977	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, Thiokol ST	2	982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubber, Viton	2	983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubidium, Rb	1	296	4	187	-	-	-	-	-	-	10	153	-	-	-	-	-
Rubidium alloy, Rb + Cs	1	751	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubidium aluminum silicate, RbAlSi <sub>3</sub> O <sub>8</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	728
Rubidium bromide, RbBr	-	5	769	8	764	8	766	-	-	8	768	-	-	-	-	13	816
Rubidium bromide + rubidium chloride, RbBr + RbCl, mixtur	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	834
Rubidium chloride, RbCl	-	-	-	-	-	8	906	-	-	8	908	-	-	-	-	13	990
Rubidium dideuterium arsenate, RbD <sub>2</sub> AsO <sub>4</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	627
Rubidium fluoride, RbF	-	5	985	-	-	-	-	-	-	-	-	-	-	-	-	13	1076
Rubidium dihydrogen arsenate, RbH <sub>2</sub> AsO <sub>4</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	630
Rubidium hydrogen fluoride, RbHF <sub>2</sub>	-	5	988	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubidium dihydrogen orthophosphate, RbH <sub>2</sub> PO <sub>4</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	690
Rubidium iodide, RbI	-	5	503	-	-	8	1014	-	-	8	1018	-	-	-	-	13	1109
Rubidium manganese fluoride, RbMnF <sub>6</sub>	-	-	-	-	-	8	983	-	-	8	985	-	-	-	-	13	1076
Rubidium nitrate, RbNO <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	671
Rubidium sulfate, Rb <sub>2</sub> SO <sub>4</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	739
Ruby	-	-	-	-	-	8	174	-	-	8	176	-	-	-	-	-	-
Ruby, spinel, natural	2	284	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ruthenium, Ru	1	300	4	190	7	591	-	-	-	-	10	154	-	-	-	12	290
Ruthenium oxide, RuO <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	341
Rutile	2	203	5	246	-	8	464 465	-	-	-	-	-	-	-	-	13	394
Rutile, nigrlne	2	203	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAE 1010, steel	1	1183	4	647	-	-	-	-	-	-	-	-	-	-	-	12	842 1165 1167



Substance Name	Thermal Conduc-tivity		Specif. Heat	Thermal Radiative Properties								Thermal Diffu-sivity		Visco-sity		Thermal Expan-sion		
				Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.								
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SAE 1015, steel	1	1186	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAE 1020, steel	1	1183	-	-	-	-	-	-	-	-	-	10	354	-	-	12	1165 1167	
SAE 1095, steel	1	1114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SAE 4130, steel	1	1153	-	-	-	-	-	-	-	-	-	10	339	-	-	-	-	
SAE 4140, steel	1	1155	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SAE 4340, steel	1	1213 1214	-	-	-	-	-	-	-	-	-	10	363 364	-	-	-	-	
SAE bearing alloy 10, tin alloy	1	1070	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SAE bearing alloy 11, tin alloy	1	1070	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SAE bearing alloy 12, lead alloy	1	991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SAE bearing alloy 40, copper alloy	1	976	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SAE bearing alloy 62, copper alloy	1	976	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SAE bearing alloy 64, copper alloy	1	976	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SAE bearing alloy 66, copper alloy	1	962	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Salt, gnome	2	832	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Salt, pool	-	-	-	-	-	8	1660	-	-	-	-	-	-	-	-	-	-	
Samarite	-	5	193	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Samarium, Sm	1	305	4	193	-	-	-	-	-	-	-	10	155	-	-	-	-	
Samarium boride, SmB <sub>2</sub>	-	-	-	8	723	-	-	-	-	-	-	-	-	-	-	13	797	
Samarium carbide, SmC <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	936	
Samarium oxide, Sm <sub>2</sub> O <sub>3</sub>	-	5	193	8	352 354 356 358	8	360	-	-	-	-	-	-	-	-	13	344	
Samarium selenide, Sm <sub>2</sub> Se <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1192	
Samarium silicate	-	-	-	-	-	-	-	-	-	8	622	-	-	-	-	-	-	
Samarium-silver intermetallic compound, SmAg <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	615	
Samarium sulfide, Sm <sub>2</sub> S <sub>3</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1240	
Sand	-	-	-	-	-	8	1678	-	-	-	-	-	-	-	-	-	-	
Sand, lowell	2	834 835	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sand, silica	2	837	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sandstones:																		
Berea	2	841 842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Berkeley	2	841 842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sandstone	2	840	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
St. Peters	2	841	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Teapot	2	842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tensleep	2	841 842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tripolite	2	842	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Santowax R	2	1005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sapphire	2	93	-	8	179 181 183	8	187	-	8	190	-	-	-	-	-	13	178 180 182 184	





Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.			
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Silicon oxides: (continued)									
Vitreous	2 184 185 187	-	-	-	-	-	-	-	-
Tridymite	-	5 213	-	-	-	-	-	-	-
Silicon oxide + chromium, cermet	-	-	-	-	-	8 1401	-	-	-
Silicon oxide + sodium oxide + $\Sigma X_4$ , mixture	2 510	-	-	-	-	-	10 441	-	-
Silicon oxide + titanium boride powders	-	-	-	8 1484	-	-	-	-	-
Silicone	-	-	-	-	-	-	10 619	-	-
Silicone, cellular	-	-	-	-	-	-	10 619	-	-
Silicone, Knapic	1 327	-	-	-	-	-	-	-	-
Silk fabric	2 1105	-	-	-	-	-	-	-	-
Sillimanite	2 454 845	5 1289	-	-	-	-	-	-	-
Silon	2 959	-	-	-	-	-	-	-	-
Silumin, sodium modified	2 920	-	-	-	-	-	-	-	-
Silver	-	6s 63	-	-	-	-	-	-	-
Silver, Ag	1 340	4 208	7 620 623 625 627	7 630 636	7 639 641 643 645 648	7 651	10 164	-	12 298
Silver, 0.6 percent impurities	1 1061	-	-	-	-	-	-	-	-
Silver, electrolytic	-	4 208	-	-	-	-	-	-	-
Silver, Mealtone hammer finish	-	-	-	9 529	-	-	-	-	-
Silver, Inquartation	-	4 208	-	-	-	-	-	-	-
Silver alloys:									
Ag + Al	-	-	-	7 1007 1009	-	-	-	-	-
Ag + Au	1 774	-	-	7 1015	-	-	-	-	-
Ag + Be	-	-	-	7 1012	-	-	-	-	-
Ag + Cd	1 770	-	-	-	-	-	-	-	12 690
Ag + Cu	1 773	-	-	7 1475	-	-	-	-	-
Ag + In	1 777	-	-	-	-	-	-	-	12 826
Ag + Mn	1 783	-	-	-	-	-	-	-	12 893
Ag + Pb	1 780	-	-	-	-	-	-	-	-
Ag + Pd	1 786	-	-	-	-	-	-	-	12 962
Ag + Pt	1 790	-	-	-	-	-	-	-	-
Ag + Sb	1 767	-	-	-	-	-	-	-	12 674
Ag + Si	-	-	-	7 1018	-	-	-	-	-
Ag + Sn	1 791	-	-	-	-	-	-	-	12 976
Ag + Zn	1 792	-	-	-	-	-	-	-	-
Ag + Cd + $\Sigma X_4$	1 1058	-	-	7 1472	-	-	-	-	-
Ag + Cd + $\Sigma X_4$ , silver solder, easy-flow	1 1059	-	-	-	-	-	-	-	-
Ag + Zn + $\Sigma X_4$	-	-	-	7 1478	-	-	-	-	-

Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
	Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.					
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Silver-aluminum intermetallic compound, Ag <sub>3</sub> Al	-	-	-	8 1352	-	-	-	-	-
Silver-antimony-tellurium intermetallic compound, AgSb	1 1335	-	-	-	-	-	-	-	-
Silver antimony telluride + tin telluride, mixture	1 1410 1411	-	-	-	-	-	-	-	-
Silver antimony telluride, AgSbTe <sub>2</sub>	1 1335	-	-	-	-	-	-	-	-
Silver bromide, AgBr	2 569	-	-	8 770 773	-	8 775	10 479	-	13 836
Silver bronze	1 579 980	-	-	-	-	-	-	-	-
Silver-cadmium intermetallic compound, AgCd	-	-	-	8 1326	-	-	-	-	-
Silver carbonate, Ag <sub>2</sub> CO <sub>3</sub>	-	5 1127	-	-	-	-	-	-	-
Silver chloride, AgCl	2 620	5 884	-	8 876	-	8 879	-	-	13 995
Silver-copper intermetallic compound, AgCu	1 1338	-	-	-	-	-	-	-	-
Silver iodide, AgI	2 563	-	-	8 1022	-	8 1024	-	-	13 1114
Silver nitrate, AgNO <sub>3</sub>	2 650	-	-	-	-	-	-	-	13 655
Silver nitrite, AgNO <sub>2</sub>	-	5 1148	-	-	-	-	-	-	-
Silver oxide, Ag <sub>2</sub> O	-	5 199	-	-	-	-	-	-	-
Silver selenide, Ag <sub>2</sub> Se	1 1339	5 553	-	-	-	-	-	-	-
Silver selenide, nonstoichiometric	-	5 556	-	-	-	-	-	-	-
Silver solder, easy-flow	1 1059	-	-	-	-	-	-	-	-
Silver solder, silver alloy easy-flow	1 1059	-	-	-	-	-	-	-	-
Silver sulfide, nonstoichiometric	-	5 705	-	-	-	-	-	-	-
Silver telluride, Ag <sub>2</sub> Te	1 1342	5 753	-	-	-	-	-	-	-
Silver telluride, nonstoichiometric	-	5 756	-	-	-	-	-	-	-
Silver-terbium intermetallic compound, Ag <sub>3</sub> Tb	-	-	-	-	-	-	-	-	12 618
Silver thioarsenate, Ag <sub>3</sub> AsS <sub>3</sub>	-	-	-	-	-	-	-	-	13 1240
Silver-zinc intermetallic compound, AgZn	-	-	-	-	-	-	-	-	12 619
Skyspar A423	-	-	9 211	9 211	9 252 255 263	-	-	-	-
Slag, mystic	2 1150	-	-	-	-	-	-	-	-
Slag wool	2 1151	-	-	-	-	-	-	-	-
Slate	2 846	-	-	-	-	-	-	-	-
SNAP fuel	-	-	-	-	-	-	10 541	-	-
Snow	-	-	-	-	-	-	10 390	-	-
Soapstone	2 853	-	-	-	-	-	-	-	-
Soda, baking	-	5 1133	-	-	-	-	-	-	-
Sodium, Na	1 349	4 213 6s 53	-	-	-	-	10 167	-	12 310
Sodium, electrolytic	-	4 215	-	-	-	-	-	-	-

Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties				Thermal Diffusivity	Viscosity		Thermal Expansion	
				Emis-sivity	Reflec-tivity	Absorp-tivity	Trans-missiv.					
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Sodium alloys:												
Na + K	1	798	4	431	-	-	-	-	-	-	-	-
Na + Hg	1	795	-	-	-	-	-	-	-	-	-	-
Sodium acetate	2	1006	-	-	-	-	-	-	-	-	-	-
Sodium aluminum oxide, $\text{Na}_2\text{O} \cdot \text{Al}_2\text{O}_3$	-	-	5	1549	-	-	-	-	-	-	-	-
Sodium aluminum fluoride, $\text{Na}_3\text{AlF}_6$	-	-	5	997	-	-	-	-	-	-	-	-
Sodium aluminum silicate, $\text{NaAlSi}_3\text{O}_8$	-	-	5	1602	-	-	-	-	-	-	13	728
Sodium bicarbonate, $\text{NaHCO}_3$	-	-	5	1133	-	-	-	-	-	-	-	-
Sodium borate	-	-	-	-	-	8	582	-	-	-	-	-
Sodium bromate, $\text{NaBrO}_3$	-	-	-	-	-	-	-	-	-	-	13	633
Sodium bromide, $\text{NaBr}$	-	-	5	772	-	-	-	-	-	-	13	821
Sodium calcium silicate, $\text{Na}_2\text{CaSiO}_4$	-	-	-	-	-	-	-	-	-	-	13	728
Sodium carbonate, $\text{Na}_2\text{CO}_3$	-	-	5	1130	-	8	593	-	-	-	-	-
Sodium chlorate, $\text{NaClO}_3$	-	-	-	-	-	8	594	-	-	-	13	648
Sodium chlorate + sodium nitrate, mixture	-	-	-	-	-	-	-	-	11	567	-	-
Sodium chloride, $\text{NaCl}$	2	621	5	887	8	881 883	8	885 886 893	8	895	10	481
Sodium ferrite	-	-	5	1560	-	-	-	-	-	-	-	-
Sodium fluoride, $\text{NaF}$	2	642	5	994	-	8	963	-	8	966	-	13
Sodium fluoride + zirconium tetrafluoride + $\text{SiF}_4$ , mixture	2	646	-	-	-	-	-	-	-	-	-	-
Sodium hexafluoroaluminate	-	-	5	997	-	-	-	-	-	-	-	-
Sodium hydrate, $\text{NaOH}$	2	790	-	-	-	-	-	-	-	-	-	-
Sodium hydrogen carbonate	-	-	5	1133	-	-	-	-	-	-	-	-
Sodium hydrogen fluoride, $\text{NaHF}_2$	-	-	5	1000	-	-	-	-	-	-	-	-
Sodium hydrogen sulfate, $\text{NaHSO}_4$	2	692	-	-	-	-	-	-	-	-	-	-
Sodium hydroxide, $\text{NaOH}$	2	790	-	-	-	-	-	-	-	-	-	-
Sodium hyposulfite, $\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$	2	693	-	-	-	-	-	-	-	-	-	-
Sodium iodate, $\text{NaIO}_3$	-	-	-	-	-	-	-	-	-	-	13	652
Sodium iodide, $\text{NaI}$	-	-	5	506	-	-	-	-	-	-	13	1116
Sodium iron dioxide	-	-	5	1560	-	-	-	-	-	-	-	-
Sodium lanthanum molybdenum oxide, $\text{Na}_2\text{O} \cdot \text{La}_2\text{O}_3 \cdot 4\text{M}$	-	-	-	-	-	-	-	-	-	-	13	521
Sodium molybdenum oxides:												
$\text{Na}_2\text{O} \cdot \text{MoO}_3$	-	-	5	1563	-	-	-	-	-	-	-	-
$\text{Na}_2\text{O} \cdot 2\text{MoO}_3$	-	-	5	1566	-	-	-	-	-	-	-	-
Sodium nickel fluoride, $\text{NaNiF}_3$	-	-	-	-	-	-	-	8	990	-	-	-
Sodium niobium oxide, $\text{Na}_2\text{O} \cdot \text{Nb}_2\text{O}_5$	-	-	-	-	-	-	-	-	-	-	13	533
Sodium nitrate, $\text{NaNO}_3$	2	651	5	1151	-	8	600	-	-	-	13	657
Sodium nitrite, $\text{NaNO}_2$	-	-	-	-	-	-	-	-	-	-	13	661 662 663 664 665 666 667

Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties								Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emis- sivity		Reflec- tivity		Absorp- tivity		Trans- missiv.				
			V.	Page	V.	Page	V.	Page	V.	Page			
Sodium oxide, Na <sub>2</sub> O	-	5	216	-	-	-	-	-	-	-	-	-	-
Sodium oxide + sodium, cermet	2 1	721 1432	-	-	-	-	-	-	-	-	-	-	-
Sodium phosphate	-	-	-	8	608	-	-	-	-	-	-	-	-
Sodium silicates:													
Na <sub>2</sub> SiO <sub>3</sub>	-	5	1569	-	-	-	-	-	-	-	-	-	-
Na <sub>2</sub> Si <sub>2</sub> O <sub>5</sub>	-	5	1572	-	-	-	-	-	-	-	-	-	-
Sodium sulfates:													
Na <sub>2</sub> SO <sub>4</sub>	-	5	1218	-	-	-	-	-	-	-	-	13	740
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ·5H <sub>2</sub> O	2	693	-	-	-	-	-	-	-	-	-	-	-
Na <sub>2</sub> SO <sub>4</sub> ·10H <sub>2</sub> O	-	5	1221	-	-	-	-	-	-	-	-	-	-
Sodium tellurate, Na <sub>2</sub> TeO <sub>4</sub>	-	5	1575	-	-	-	-	-	-	-	-	-	-
Sodium tetrafluoroborate, NaBF <sub>4</sub>	-	-	-	-	-	-	-	-	-	-	-	13	1076
Sodium-thallium intermetallic compound, NaTl	-	-	-	-	-	-	-	-	-	-	-	12	622
Sodium titanium oxides:													
Na <sub>2</sub> O·TiO <sub>2</sub>	-	5	1578	-	-	-	-	-	-	-	-	-	-
Na <sub>2</sub> O·2TiO <sub>2</sub>	-	5	1581	-	-	-	-	-	-	-	-	-	-
Na <sub>2</sub> O·3TiO <sub>2</sub>	-	5	1584	-	-	-	-	-	-	-	-	-	-
Sodium trideuterium selenite, NaD <sub>3</sub> (SeO <sub>3</sub> ) <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	13	697
Sodium trihydrogen selenite, NaH <sub>3</sub> (SeO <sub>3</sub> ) <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	13	699
Sodium tripolyphosphate	-	-	-	8	608	-	-	-	-	-	-	-	-
Sodium tungsten oxides:													
Na <sub>2</sub> O·WO <sub>3</sub>	-	5	1587	-	8	666	-	-	-	-	-	13	592
Na <sub>2</sub> O·2WO <sub>3</sub>	-	5	1590	-	-	-	-	-	-	-	-	-	-
Sodium vanadium oxides:													
Na <sub>2</sub> O·V <sub>2</sub> O <sub>5</sub>	-	5	1593	-	8	667	-	-	-	-	-	-	-
2Na <sub>2</sub> O·V <sub>2</sub> O <sub>5</sub>	-	5	1599	-	-	-	-	-	-	-	-	-	-
3Na <sub>2</sub> O·V <sub>2</sub> O <sub>5</sub>	-	5	1596	-	-	-	-	-	-	-	-	-	-
Soil	2	847	-	-	-	-	-	-	10	549	-	-	-
Soil, sandy clay	2	805	-	-	-	-	-	-	-	-	-	-	-
Solar cell, IRC	-	-	8	88 92	8	100	-	-	-	-	-	-	-
Solder, Pb + Sn	-	4	446	7	948	-	-	-	-	-	-	-	-
Solder, soft	1	840	-	-	-	-	-	-	-	-	-	-	-
Spacemetal	-	-	-	-	-	-	-	-	10	552	-	-	-
Spectrosil	-	-	-	-	-	-	-	-	-	-	-	13	365 366
Spectral kohle f	2	54	-	-	-	-	-	-	-	-	-	-	-
Spinel	2	284 369 848	-	8	1674	8	576	-	8	578 10 417 419 428	-	13	479
Spinel, natural ruby	2	284	-	-	-	-	-	-	-	-	-	-	-
Spinel, synthetic	2	287	-	-	-	-	-	-	-	-	-	-	-
Spinel firebrick	2	905	-	-	-	-	-	-	-	-	-	-	-

[illegible]





Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.			
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Steel, crucible	1 1204	-	-	-	-	-	-	-	-
Steel, Cubex	-	-	-	-	-	-	-	-	12 870
Steel, eutectoid	-	4 655	-	-	-	-	-	-	-
Steel, Fernichrome	-	-	-	-	-	-	-	-	12 1177 1178
Steel, Fernico	-	-	-	-	-	-	-	-	12 1178
Steel, fish-plate	1 1119	-	-	-	-	-	-	-	-
Steel, FNCT	1 1213	-	-	-	-	-	-	-	-
Steel, German, Krupp	1 1115 1184	-	-	-	-	-	-	-	-
Steel, German PD4	1 1118	-	-	-	-	-	-	-	-
Steel, German, St42.11	1 1186 1218	-	-	-	-	-	-	-	-
Steel, GX 4881	-	-	-	-	-	-	10 342	-	-
Steel, Haynes alloy N-155	1 1177	-	7 1227 1238	-	-	-	-	-	-
Steel, high speed	1 1230 1231 1232 1234	-	-	-	-	-	-	-	-
Steel, high speed 18	1 1233	-	-	-	-	-	-	-	-
Steel, high speed 18-4-1	1 1233	-	-	-	-	-	-	-	-
Steel, high speed M1	1 1195	-	-	-	-	-	-	-	-
Steel, high speed M2	1 1233	-	-	-	-	-	-	-	-
Steel, high speed M10	1 1195	-	-	-	-	-	-	-	-
Steel, high speed T1	1 1233	-	-	-	-	-	-	-	-
Steel, high-perm-49	1 1199	-	-	-	-	-	-	-	-
Steel, hX 4249	-	-	-	-	-	-	10 342	-	-
Steel, Incoloy	-	4 726	-	-	-	-	-	-	-
Steel, Invar	1 1199	-	-	-	-	-	-	-	12 852 853 1175 1178 1179 1180 1181 1182
Steel, Invar 36	-	-	-	-	-	-	-	-	12 1183
Steel, Invar free cut	1 1205	-	-	-	-	-	-	-	-
Steel, Japanese	1 1210	-	-	-	-	-	-	-	-
Steel, Kanthal	-	-	7 1192	-	7 1204	-	-	-	-
Steel, Kanthal, A	-	-	7 1192	-	-	-	-	-	-
Steel, Kanthal, Oxidized	-	-	9 1303	-	-	-	-	-	-
Steel, Kovar	1 1203	-	-	7 1313	-	-	-	-	-
Steel, low alloy	1 1213	-	-	-	-	-	-	-	-
Steel, low-exp-42	1 1205	-	-	-	-	-	-	-	-
Steel, low Mn	1 1183	-	-	-	-	-	-	-	-
Steel, M1 high speed tool	1 1195	-	-	-	-	-	-	-	-
Steel, M10 high speed tool	1 1195	-	-	-	-	-	-	-	-



Substance Name	Thermal	Specif.	Thermal Radiative Properties						Thermal	Visco-	Thermal			
	Conduc-	Heat	Emis-		Reflec-		Absorp-	Trans-	Diffu-	sity	Expan-			
	tivity		sivity	tivity	tivity	tivity	missiv.	sivity		ension				
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page		
Steel, Russian, R15	1	1235	-	-	-	-	-	-	-	-	-	-		
Steel, Russian, R15Kh3	1	1235	-	-	-	-	-	-	-	-	-	-		
Steel, Russian, R15Kh3K5	1	1235	-	-	-	-	-	-	-	-	-	-		
Steel, Russian, R15Kh3K10	1	1235	-	-	-	-	-	-	-	-	-	-		
Steel, Russian, R15Kh3K12	1	1235 1236	-	-	-	-	-	-	-	-	-	-		
Steel, Russian, R15Kh4	1	1236	-	-	-	-	-	-	-	-	-	-		
Steel, Russian, R18	1	1236	-	-	-	-	-	-	-	-	-	-		
Steel, SAE 1010	1	1183	4	647	-	-	-	-	-	-	12	842 1165 1167		
Steel, SAE 1015	1	1186	-	-	-	-	-	-	-	-	-	-		
Steel, SAE 1020	1	1183	-	-	-	-	-	-	10	354	-	12 1167		
Steel, SAE 1095	1	1114	-	-	-	-	-	-	-	-	-	-		
Steel, SAE 4130	1	1153	-	-	-	-	-	-	10	339	-	-		
Steel, SAE 4140	1	1155	-	-	-	-	-	-	-	-	-	-		
Steel, SAE 4340	1	1213 1214	-	-	-	-	-	-	10	363 364	-	-		
Steel, silicon	1	1217	4	668 732	-	-	-	-	10	366	-	12 868		
Steel, silver	1	1114	-	-	-	-	-	-	-	-	-	-		
Steel, soft	1	1126	-	-	-	-	-	-	-	-	-	-		
Steel, stainless	1	1148 1152 1160 1164	4	632 635 638 678 690 699 717	7	1178 1184 1190 1210 1231 1242 1256	7	1196 1264 1283	7	1203 1206	-	10 338 344	-	12 1138
Steel, stainless, 15-5PH	-	-	-	-	-	-	-	-	-	-	-	12 1141		
Steel, stainless, 17-4PH	1	1168	4	717	-	-	-	-	-	-	-	12 1138 1141		
Steel, stainless, 17-7	1	1165	-	-	-	-	-	-	-	-	-	-		
Steel, stainless, 17-7PH	1	1166	4	696	7	1223 1237 1245	7	1266 1268	7	1302	-	-	12 1138 1141	
Steel, stainless, 18-8	1	1161 1162 1167 1168	-	-	7	1212 1214 1225 1226	-	-	7	1302	-	-	-	
Steel, stainless, 20Cr-25Ni	-	-	-	-	-	-	-	-	-	-	-	12 1175 1186		
Steel, stainless, 347, oxidized	-	-	-	-	9	1305 1308	-	-	-	-	-	-		
Steel, stainless, 416	1	1168	-	-	-	-	-	-	-	-	-	-		
Steel, stainless, 3754	1	1161	-	-	-	-	-	-	-	-	-	-		
Steel, stainless, A-286	-	-	-	-	7	1322	7	1325	-	-	-	12 1175 1177		
Steel, stainless, AFC-77	-	-	-	-	-	-	-	-	-	-	-	12 1145		
Steel, stainless, AISI 202	-	-	-	-	-	-	-	-	10	339 340	-	-		
Steel, stainless, AISI 301	1	1165	4	693	7	1221 1226	7	1269 1288	7	1300	-	10 345 348	-	12 1138 1141 1142

Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Steel, stainless, AISI 301, corrugated sheets	-	-	-	-	-	-	-	-	-	-	10	552	-	-	-	-	-	-
Steel, stainless, AISI 302	1	1161	-	-	7	1212 1213	-	-	7	1291	-	-	10	345	-	-	12	1138 1142
Steel, stainless, AISI 303	1	1165 1168	-	-	7	1212 1226 1254 1258 1259 1260	-	-	7	1297	-	-	-	-	-	-	12	1138 1142
Steel, stainless, AISI 304	1	1161 1165 1168	4	699	7	1213 1227 1244	7	1270	-	-	-	-	-	-	-	-	-	-
Steel, stainless, AISI 304ELC	-	-	-	-	7	1213	-	-	-	-	-	-	-	-	-	-	-	-
Steel, stainless, AISI 304L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1138 1142
Steel, stainless, AISI 305	-	-	4	702	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, stainless, AISI 309	-	-	-	-	-	-	-	-	-	-	-	-	10	346	-	-	-	-
Steel, stainless, AISI 310	1	1167 1168	4	705	7	1212 1213	-	-	-	-	-	-	-	-	-	-	12	1138 1142
Steel, stainless, AISI 316	1	1166	4	708	7	1221 1224 1237 1244	7	1266 1270 1271 1288	7	1300 130	-	-	10	347 348	-	-	12	1138 1143
Steel, stainless, AISI 321	-	-	-	-	7	1224 1237 1238 1244 1246	7	1266 1270 1272 1285	7	129	-	-	10	347	-	-	12	1138 1143
Steel, stainless, AISI 330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1177
Steel, stainless, AISI 347	1	1166 1168	4	711	7	1212 1222	7	1288	-	-	-	-	10	348	-	-	12	1138 1143 1144
Steel, stainless, AISI 403	1	1149	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, stainless, AISI 406	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1138 1144
Steel, stainless, AISI 410	1	1150	-	-	-	-	-	-	-	-	-	-	10	340	-	-	12	1138 1144
Steel, stainless, AISI 416	-	-	-	-	-	-	-	-	-	-	-	-	10	340 341	-	-	12	1138 1144
Steel, stainless, AISI 420	1	1162	4	678	-	-	-	-	-	-	-	-	-	-	-	-	12	1138 1144
Steel, stainless, AISI 422	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1138 1145
Steel, stainless, AISI 430	1	1154	4	681	7	1193	-	-	-	-	-	-	10	341	-	-	-	-
Steel, stainless, AISI 430F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1138 1145
Steel, stainless, AISI 440C	1	1154	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1138 1145
Steel, stainless, AISI 446	1	1155 1156	4	684	7	1180 1187	7	1198	7	1207	-	-	10	341 342	-	-	12	1138 1145
Steel, stainless, AISI 455	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1145
Steel, stainless, AISI 633	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1145
Steel, stainless, AM 35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1145
Steel, stainless, AM 335	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1145
Steel, stainless, AM 350	-	-	-	-	7	1225 1238 1245	7	1266 1267 1268	7	1302 1303	-	-	-	-	-	-	-	-

Substance Name	Thermal	Specif.	Thermal Radiative Properties				Thermal	Visco-	Thermal	
	Conduc-	Heat	Emis-		Reflec-	Absorp-	Trans-	Diffu-	sity	Expan-
	tivity		sivity	tivity	tivity	missiv.	sivity		ension	
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Steel, stainless, AM 355	1 1168	4 717	-	-	-	-	-	-	-	-
Steel, stainless, AM 362	-	-	-	-	-	-	-	-	-	12 1145
Steel, stainless, AM 363	-	-	-	-	-	-	-	-	-	12 1145
Steel, stainless, AS21	1 1161	-	-	-	-	-	-	-	-	-
Steel, stainless, Ascoloy	-	-	-	-	-	-	-	-	-	12 1148
Steel, stainless, austenite	-	4 655	-	-	-	-	-	-	-	12 1138 1147
Steel, stainless, austenitic	1 1165 1183	-	-	-	-	-	-	-	-	-
Steel, stainless, British, Era ATV	1 1213	-	-	-	-	-	-	-	-	-
Steel, stainless, British, F.H.	1 1161	-	-	-	-	-	-	-	-	-
Steel, stainless, British, G 18B	1 1165 1213	-	-	-	-	-	-	-	-	-
Steel, stainless, British, Jessop G 17	1 1213	-	-	-	-	-	-	-	-	-
Steel, stainless, British, R20	1 1165	-	-	-	-	-	-	-	-	-
Steel, stainless, British, SF 11	1 1149	-	-	7 938	-	-	-	-	-	-
Steel, stainless, Carpenter 20-CB	-	-	-	-	-	-	-	-	-	12 1177
Steel, stainless, Crucible HNM	1 1168	4 714	-	-	-	-	-	-	-	-
Steel, stainless, French, Nimonic DS	1 1213	-	-	-	-	-	-	-	-	-
Steel, stainless, German X8CrNiMoNb 16 16	-	-	-	-	-	-	10 350 364	-	-	-
Steel, stainless, H-11, AMS 6487	-	-	-	-	-	-	-	-	-	12 1146
Steel, stainless, high alloy	1 1214	-	-	-	-	-	-	-	-	-
Steel, stainless, Kromare 55	-	-	-	-	-	-	-	-	-	12 1183
Steel, stainless, Macloy G	1 1213	-	-	-	-	-	-	-	-	-
Steel, stainless, Mark 1X 18 N9T	-	4 699	-	-	-	-	-	-	-	-
Steel, stainless, Mark 12 MX	-	4 723	-	-	-	-	-	-	-	-
Steel, stainless, N-155	-	-	7 1180 1181 1186 1222 1226 1236	7 1198 1266	7 1207 130	-	-	-	-	-
Steel, stainless, Nimonic PE7	1 1206	-	-	-	-	-	-	-	-	-
Steel, stainless, oxidized	-	-	9 1303	-	-	-	-	-	-	-
Steel, stainless, PH14-8Mo	-	-	-	-	-	-	-	-	-	12 1146
Steel, stainless, PH15-7Mo	-	-	7 1223 1237 1245	7 1266 1267	7 1301	-	-	-	-	-
Steel, stainless, Rex 78	1 1213	-	-	-	-	-	-	-	-	-
Steel, stainless, Russian	1 1150 1161	-	-	-	-	-	-	-	-	-
Steel, stainless, Russian, OKh 16N 36V 3T	-	4 726	-	-	-	-	-	-	-	-
Steel, stainless, Russian, OKh 20N 60B	-	-	-	-	-	-	10 299	-	-	-
Steel, stainless, Russian, OKh 21N 78T	-	-	-	-	-	-	10 300	-	-	-
Steel, stainless, Russian, 1Kh 14N 14V 2M	1 1166 1214	-	-	-	-	-	-	-	-	-
Steel, stainless, Russian, 1Kh 18N 9T	1 1168	4 699	-	-	-	-	-	-	-	-

Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.		Thermal Diffusivity		Viscosity		Thermal Expansion	
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Steel, stainless, Russian, 4Kh 13	-	-	4	690	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, stainless, Russian, 5 ZA 2	1	1213	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, stainless, Russian, 12MKH	1	1192	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, stainless, Russian, 15Kh 12VMF	1	1156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, stainless, Russian, EI-802	1	1156 1157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, stainless, Russian, EI-855	1	1214	4	726	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, stainless, Russian, EYA 1T	1	1168	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, stainless, Russian, EYA 2	1	1166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, stainless, Russian, WF 100	1	1166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, stainless, SF 20	-	-	-	-	-	-	7	1266	-	-	-	-	-	-	-	-	-	-
Steel, T-261	-	-	4	655	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, T-262	-	-	4	655	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, T-270	-	-	4	655	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, T-278	-	-	4	655	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, T-279	-	-	4	655	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, T-310	-	-	4	655	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, T-311	-	-	4	655	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, tin	-	-	4	672	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, titanium	1	1225	4	675 735	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, tool	1	1115 1233	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Steel, tool 1.1 C	-	-	-	-	-	-	-	-	-	-	-	-	10	335	-	-	-	-
Steel, tungsten	1	1226	4	738	7	945	-	-	-	-	-	-	-	-	-	-	12	1199
Steel, vascojet 1000	-	-	-	-	7	1192	7	1199	-	-	-	-	-	-	-	-	-	-
Stellite, 10 B2	2	853	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stellite	-	-	-	-	-	-	7	1154	-	-	-	-	-	-	-	-	-	-
Stellite 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1067 1069
Stellite 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1067 1069
Stellite 21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1067 1069
Stellite 23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1067 1069
Stellite 25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1067 1069
Stellite 27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1067 1069
Stellite 30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1067 1070
Stellite 31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1067 1070
Stellite ME 1049	-	-	4	526	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stibium	1	10	4	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stilbite	-	-	-	-	-	-	-	-	-	-	8	1694	-	-	-	-	-	-
Strawberry	-	-	-	-	-	-	-	-	-	-	-	-	10	645	-	-	-	-







Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties				Thermal Diffusivity		Viscosity		Thermal Expansion			
					Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.					
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Tantalum beryllides:																
TaBe <sub>1,2</sub>	-		5	322	-		-		-		-		-		-	
Ta <sub>2</sub> Be <sub>1,7</sub>	-		5	325	-		-		-		-		-		-	
Tantalum borides:																
TaB	-		5	372	-		-		-		-		-		13	797
TaB <sub>2</sub>	1	1345	5	368	-		-		-		-		-		13	772
Tantalum carbides:																
TaC	2	589	5	451	8	811 813 815 817	-		-		-		10	483	-	13 879
Ta <sub>2</sub> C	-		-		-		-		-		-		-		13	936
Tantalum carbide + tungsten carbide, mixture	-		-		-		-		-		-		-		13	940
Tantalum-germanium intermetallic compound, TaGe <sub>2</sub>	1	1348	-		-		-		-		-		-		-	
Tantalum nitrides:																
TaN	2	665	5	1090	8	1072 1074 1076	-		-		-		-		13	1162
Ta <sub>2</sub> N	-		-		8	1075	-		-		-		-		-	
Tantalum oxide, Ta <sub>2</sub> O <sub>5</sub>	-		5	228	8	427 428	8	430	-		-		-		13	374
Tantalum oxide + beryllium tantalum compound, cermet	-		-		8	1403 1404	8	1406	-		-		-		-	
Tantalum phosphate, TaPO <sub>4</sub>	-		-		-		-		-		-		-		13	690
Tantalum silicide, TaSi <sub>2</sub>	-		5	598	8	1156 1157 1159	8	1161	-		-		-		13	1202
Tantalum vanadium oxide, Ta <sub>2</sub> O <sub>5</sub> ·V <sub>2</sub> O <sub>5</sub>	-		-		-		-		-		-		-		13	597
Tar camphor	-		6s	69	-		-		-		-		-		-	
Teak	2	1087	-		-		-		-		-		10	646	-	
Teak, burmese	-		-		-		-		-		-		10	646	-	
Technetium	1	363	-		-		-		-		-		10	178	-	
Teflon	2	967	-		-		-		-		-		10	609	-	13 1445
Teflon 5	-		-		-		-		-		-		-		13	1413
Teflon 6	-		-		-		-		-		-		-		13	1445
Teflon, AMS 3651	-		-		-		8	1733	-		-		-		-	
Teflon, BMS-a-71	-		-		-		8	1733	-		-		-		-	
Teflon, Duroid 5600	2	968	-		-		-		-		-		-		-	
Teflon I	-		-		-		-		-		-		-		13	1445
Teflon film	-		-		-		-		-		-		-		13	1447
Teflon TF1	-		-		-		-		-		-		-		13	1447
Tekite, synthetic	-		-		-		-		-		-		10	579	-	
Tellurac-cured butyl	2	983	-		-		-		-		-		-		-	
Telluric acid anhydride	-		5	231	-		-		-		-		-		-	
Tellurite	-		5	231	-		-		-		-		-		-	

Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emis-sivity		Reflec-tivity		Absorp-tivity		Trans-missiv.							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Tellurium, Te	1	366	4	229	-	8	123 125 128	-	8	130 136	10	181	-	13	163	-	-	-
Tellurium alloys:																		
Te + Se	1	805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Te + Tl	1	808	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Te + As + SX4	1	1068	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tellurium dioxide, TeO <sub>2</sub>	-	5	231	8	432	8	434	-	8	436	-	-	-	-	-	-	-	-
Terblum, Tb	1	372	4	232	-	-	-	-	-	-	-	10	182	-	12	323	-	-
Terblum alloy, Tb + Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	983	-	-
Terblum borides:																		
TbB <sub>4</sub>	-	-	-	8	723	-	-	-	-	-	-	-	-	-	-	-	-	-
TbB <sub>1,2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	791	-	-
Terblum carbide, TbC <sub>2</sub>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	936	-	-
Terylene filament yarn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	1438	-	-
Tetrabromoactylene	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrabromomethane	-	6s	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
sym-Tetrabromoethane	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrabromoethane	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
sym-Tetrachloroethane	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloro-1,2-difluoroethane	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethylene	-	6	159 6s 90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorosilane	-	6s	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetradecane	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetradeteriomethane	-	6s	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrafluorosilane	-	6s	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3,4-Tetrahydrobenzene	-	6s	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3,4-Tetramethylbenzene	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3,4-tetramethylbenzene, prehnitene	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3,4-tetramethylbenzene, prehnitole	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3,4-tetramethylbenzene, prehnitol	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3,5-Tetramethylbenzene	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4,5-Tetramethylbenzene	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4,5-Tetramethylbenzene, durane	-	6s	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetramethylmethane	-	6s	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetranitriomethane	-	6s	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrol	-	6s	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Textolite plastic	-	-	-	-	-	-	-	-	-	-	-	10	559	-	-	-	-	-
TFE-fluorocarbon	-	-	-	-	-	-	-	-	-	-	-	10	588	-	-	-	-	-
Thallium, Tl	1	376	4	237	-	7	690 693	-	7	696	10	183	-	12	328	-	-	-



Substance Name	Thermal	Specif.	Thermal Radiative Properties				Thermal	Visco-	Thermal
	Conduc-	Heat	Emis-	Reflec-	Absorp-	Trans-	Diffu-	sity	Expan-
	tivity		sivity	tivity	tivity	missiv.	sivity		sion
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Thorium carbides:									
ThC	2 592	-	8 852	-	-	-	-	-	13 937
ThC <sub>2</sub>	2 593	-	8 852	-	-	-	-	-	13 886
Nonstoichiometric	-	5 454	-	-	-	-	-	-	-
Thorium monocarbide + uranium monocarbide, ThC + UC, mixt	-	-	-	-	-	-	-	-	13 941
Thorium tetrafluoride, ThF <sub>4</sub>	-	5 1009	-	-	-	-	-	-	-
Thorium nitride, ThN	-	-	-	-	-	-	-	-	13 1163
Thorium oxide, ThO <sub>2</sub>	2 195	5 234	8 438 440	8 442 444	8 446	-	10 401	-	13 376
Thorium oxide + molybdenum, cermet	1 1429	-	-	-	-	-	-	-	-
Thorium oxide + nickel, cermet	-	-	8 1408	-	-	-	-	-	-
Thorium oxide + tungsten, cermet	1 1439	-	-	-	-	-	-	-	-
Thorium oxide + uranium oxide, mixture	2 413	-	-	-	-	-	-	-	-
Thorium phosphide, ThP	-	-	-	-	-	-	-	-	13 1183
Thorium silicate, ThSiO <sub>3</sub>	-	-	-	-	-	-	-	-	13 728
Thorium sulfide, ThS	-	-	-	-	-	-	-	-	13 1240
Thorium disulfide, ThS <sub>2</sub>	-	5 711	-	-	-	-	-	-	-
Thoron	3 84	-	-	-	-	-	-	-	-
Thulia	-	-	8 447 450	-	-	-	-	-	-
Thulium, Tm	1 385	4 245	-	-	-	-	10 187	-	12 336
Thulium borides:									
TmB <sub>4</sub>	-	-	8 723	-	-	-	-	-	-
TmB <sub>12</sub>	-	-	-	-	-	-	-	-	13 791
Thulium oxide, Tm <sub>2</sub> O <sub>3</sub>	-	-	8 447 450	-	-	-	-	-	13 383
Tin, Sn	1 389	4 249	7 703 705	7 707	7 710 712 714 717	7 720	10 188	-	12 339
Tin, gray	-	4 249	-	-	-	-	-	-	12 341 12 341
Tin, white	-	4 249	-	-	-	-	-	-	-
Tin anhydride, SnO <sub>2</sub>	2 199	-	-	-	-	-	-	-	-
Tin alloys:									
Sn + Ag	1 845	-	-	-	-	-	-	-	-
Sn + Al	1 823	-	-	-	-	-	-	-	-
Sn + Bi	1 827	4 440	-	-	-	-	-	-	12 684
Sn + Cd	1 830	-	-	-	-	-	-	-	12 697
Sn + Cu	1 833	-	-	-	-	-	-	-	-
Sn + In	1 834	4 443	-	-	7 1026	-	-	-	12 835
Sn + Hg	1 842	-	-	-	-	-	-	-	-
Sn + Mg	-	4 449	-	-	-	-	-	-	12 884
Sn + Pb	1 839	4 446	-	-	-	-	-	-	12 872

[illegible]

Substance Name	Thermal Conductivity		Specif. Heat	Thermal Radiative Properties				Thermal Diffusivity		Viscosity		Thermal Expansion			
				Emis-sivity	Reflec-tivity	Absorp-tivity	Trans-missiv.								
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	
Titanium alloys:															
Ti + Al	1	848	-	-	-	-	-	-	10	260	-	-	12	659	
Ti + Al, A-110	1	1074	-	-	-	-	-	-	-	-	-	-	-	-	
Ti + Al, BT-5	-	-	-	-	-	-	-	-	10	261	-	-	-	-	
Ti + Al, Russian, 48-OT-3	-	-	-	-	-	-	-	-	-	-	-	-	13	752	
Ti + Cr	-	-	-	-	-	-	-	-	-	-	-	-	12	726	
Ti + Mo	-	4	456	-	-	-	-	-	-	-	-	-	12	910	
Ti + Mo, M-6	-	4	456	-	-	-	-	-	-	-	-	-	-	-	
Ti + Mo, M-8	-	4	456	-	-	-	-	-	-	-	-	-	-	-	
Ti + Mo, M-9	-	4	456	-	-	-	-	-	-	-	-	-	-	-	
Ti + Mo, M-10	-	4	456	-	-	-	-	-	-	-	-	-	-	-	
Ti + Mn	1	849	4	453	7	1028 1032	7	1037	7	1041	-	-	12	894	
Ti + Mn, AMS 4908	-	-	-	7	1030	7	1038	-	-	-	-	-	-	-	
Ti + Mn, AMS 4908A	1	850	-	-	-	-	-	-	-	-	-	-	-	-	
Ti + Mn, ASTM B265-58T, grade 3 and 4	-	4	257	-	-	-	-	-	-	-	-	-	-	-	
Ti + Mn, ASTM B265-58T, grade 6	1	1074	-	-	-	-	-	-	-	-	-	-	-	-	
Ti + Mn, ASTM B265-58T, grade 7	1	850	-	-	-	-	-	-	-	-	-	-	-	-	
Ti + Mn, C-110M	1	850	4	453	7	1030 1034	7	1038	7	1041	-	-	-	-	
Ti + Mn, MST-8Mn	1	850	4	453	-	-	-	-	-	-	-	-	-	-	
Ti + Mn, MSM-8Mn	-	4	453	-	-	-	-	-	-	-	-	-	-	-	
Ti + Mn, RS-110 A	-	4	453	-	-	-	-	-	-	-	-	-	-	-	
Ti + Mn, RC-130A	-	4	453	-	-	-	-	-	-	-	-	-	-	-	
Ti + Mn, TI-130A	1	850	-	-	-	-	-	-	-	-	-	-	-	-	
Ti + Mn, TI-8Mn	1	850	4	453	-	-	-	-	-	-	-	-	-	-	
Ti + O	1	852	-	-	-	-	-	-	-	-	-	-	-	-	
Ti + V	-	-	-	-	-	-	-	-	-	-	-	-	12	990	
Ti + W	-	-	-	-	-	-	-	-	-	-	-	-	12	988	
Ti + Zr	-	-	-	-	-	-	-	-	-	-	-	-	12	993	
Ti + Al + ΣX <sub>i</sub>	1	1073	4	598	7	1483 1486 1490	7	1497	7	1500	-	10	325	12	1272
Ti + Al + ΣX <sub>i</sub> , AMS 4925A	1	1074 1084	-	-	-	-	-	-	-	-	-	-	-	-	
Ti + Al + ΣX <sub>i</sub> , AMS 4926	1	1074	-	-	-	-	-	-	-	-	-	-	-	-	
Ti + Al + ΣX <sub>i</sub> , AMS 4928	1	1074	4	598	-	-	-	-	-	-	-	-	-	-	
Ti + Al + ΣX <sub>i</sub> , AMS 4929	1	1074	-	-	-	-	-	-	-	-	-	-	-	-	
Ti + Al + ΣX <sub>i</sub> , AMS 4969	1	1074	-	-	-	-	-	-	-	-	-	-	-	-	
Ti + Al + ΣX <sub>i</sub> , anodized	-	-	-	-	-	9	1289	-	-	-	-	-	-	-	
Ti + Al + ΣX <sub>i</sub> , anodized, A-110 AT	-	-	-	-	-	9	1289	-	-	-	-	-	12	1274 1280	
Ti + Al + ΣX <sub>i</sub> , ASTM B265-58T, grade 6	1	1074	-	-	-	-	-	-	-	-	-	-	-	-	
Ti + Al + ΣX <sub>i</sub> , C-120AV	-	4	598	-	-	-	-	-	-	-	-	-	12	1274	
Ti + Al + ΣX <sub>i</sub> , C-130AM	1	1074	-	-	-	-	-	-	-	-	-	-	-	-	

Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
			Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.			
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Titanium alloys: (continued)									
Ti + Al + $\Sigma X_i$ , MSM-4Al-4Mn	1 1074 1084	-	-	-	-	-	-	-	-
Ti + Al + $\Sigma X_i$ , MSM-6Al-4V	1 1074	4 598	-	-	-	-	-	-	-
Ti + Al + $\Sigma X_i$ , MST-6Al-4V	1 1074	4 598	-	-	-	-	-	-	-
Ti + Al + $\Sigma X_i$ , RC-130B	-	-	-	-	-	-	-	-	12 1274
Ti + Al + $\Sigma X_i$ , TA5E	-	-	7 1484	-	-	-	-	-	-
Ti + Al + $\Sigma X_i$ , TA6V	-	-	7 1484	-	-	-	-	-	-
Ti + Al + $\Sigma X_i$ , Ti-155A	1 1074	-	-	-	-	-	-	-	-
Ti + Al + $\Sigma X_i$ , Ti-4Al-3Mo-1V	1 1074 1075	4 598	-	-	-	-	-	-	12 1274 1275
Ti + Al + $\Sigma X_i$ , Ti-4Al-4Mn	1 1074 1084	-	-	-	-	-	-	-	-
Ti + Al + $\Sigma X_i$ , Ti-5Al-1.4Cr-1.5Fe-1.2Mo	1 1074	-	-	-	-	-	-	-	-
Ti + Al + $\Sigma X_i$ , Ti-5Al-2.5Sn	1 1074	-	-	-	-	-	-	-	12 1274 1280
Ti + Al + $\Sigma X_i$ , Ti-5Al-5Sn-5Zr	-	-	-	-	-	-	-	-	12 1275 1276
Ti + Al + $\Sigma X_i$ , Ti-5Al-5Sn-5Zr-1Mo-1V	-	-	-	-	-	-	-	-	12 1276 1277
Ti + Al + $\Sigma X_i$ , Ti-6Al-2Sn-4Zr-2Mo	-	-	-	-	-	-	-	-	12 1277 1278
Ti + Al + $\Sigma X_i$ , Ti-6Al-4V	1 1074	4 598	7 1484 1488 1492 1493	7 1498	7 1501	-	10 326	-	12 1278 1279
Ti + Al + $\Sigma X_i$ , Ti-6Al-4V-3Co	-	-	-	-	-	-	-	-	12 1279
Ti + Cr + $\Sigma X_i$	1 1077	4 601	-	-	-	-	-	-	12 1285
Ti + Cr + $\Sigma X_i$ , Ti-150A	1 1078 1089	-	-	-	-	-	-	-	12 1287
Ti + Cr + $\Sigma X_i$ , Ti-3Al-5Cr	-	-	-	-	-	-	-	-	12 1287
Ti + Fe + $\Sigma X_i$	1 1080	4 604	-	-	-	-	-	-	-
Ti + Fe + $\Sigma X_i$ , Ti-140A	1 1081	-	-	-	-	-	-	-	-
Ti + Fe + $\Sigma X_i$ , Ti-2Cr-2Fe-2Mo	1 1081	-	-	-	-	-	-	-	-
Ti + Fe + $\Sigma X_i$ , Russian, ferrocarbontitanium	1 1081	-	-	-	-	-	-	-	-
Ti + Mn + $\Sigma X_i$	1 1083	-	7 1503 1505	-	-	-	-	-	-
Ti + Mn + $\Sigma X_i$ , RC-130B	1 1084	-	-	-	-	-	-	-	-
Ti + Mn + $\Sigma X_i$ , RS-120	-	-	7 1503 1506	-	-	-	-	-	-
Ti + Sn + $\Sigma X_i$	-	-	-	-	-	-	-	-	12 1290
Ti + Sn + $\Sigma X_i$ , Ti-679	-	-	-	-	-	-	-	-	12 1293
Ti + V + $\Sigma X_i$	1 1086	4 607	-	7 1508	-	-	-	-	12 1291
Ti + V + $\Sigma X_i$ , anodized	-	-	-	9 1293	-	-	-	-	-
Ti + V + $\Sigma X_i$ , Ti-2.5Al-16V	1 1087	4 607	-	-	-	-	-	-	12 1294 1295
Ti + V + $\Sigma X_i$ , Ti-3Al-11Cr-13V	1 1087	-	-	-	-	-	-	-	-
Ti + V + $\Sigma X_i$ , Ti-13V-11Cr-3Al	1 1087	4 607	-	-	-	-	-	-	-









Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
					Emissivity		Reflectivity		Absorptivity		Transmissivity							
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
1,3,5-Trimethylbenzene	-	-	6s	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,2,3-Trimethylbutane	-	-	6s	93	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trimethyl carbinol	-	-	6s	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trimethylene	-	-	6s	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trimethylene bromide	-	-	6s	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trimethylene dibromide	-	-	6s	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trimethylethylene	-	-	6s	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,2,4-Trimethylpentane	-	-	6s	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,3-Trimethylpentane	-	-	6s	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,4-Trimethylpentane	-	-	6s	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,4-Trimethyl-2-pentene	-	-	6s	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrotoluene	2	1007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triptane	-	-	6s	93	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tritimethane	-	-	6s	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tritiomethane	-	-	6s	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tritium	3	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tritium sulfide	-	-	6s	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trisulfomethane	-	-	6s	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triuranium disilicide + triuranium monosilicide, mixture	-	-	5	622	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trizinc dithiodine hexasulfide	-	-	-	-	-	-	-	-	-	-	8	1236	-	-	-	-	-	-
Tuballoy	1	429	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuff	2	856	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tungstates, miscellaneous	-	-	-	-	-	-	8	665	-	-	-	-	-	-	-	-	-	-
Tungsten, W	1	415	4	263	7	776 782 790 796 808 810	7	812 814 819 823	7	825	-	10	198	-	-	12	354	-
Tungsten alloys:																		
W + Co	-	-	4	459	-	-	-	-	-	-	-	-	-	-	-	12	757	-
W + Cu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	769	-
W + Fe	-	-	4	462	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W + Mo	-	-	-	-	7	1043 1045	-	-	-	-	-	-	-	-	-	-	-	-
W + Re	1	855	-	-	7	1048 1051	-	-	-	-	-	-	-	-	-	12	973	-
W + Re, VR-27-VT	-	-	-	-	7	1049	-	-	-	-	-	-	-	-	-	-	-	-
W + Ta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	981	-
W + Ti	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	988	-
W + Fe + EX6	1	1090	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W + Fe + EX6, Russian, ferrotungsten	1	1090	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W + Ni + EX6	1	1091	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1297	-
W + Ni + EX6, malleable 1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1297 1299	-
W + Re + EX6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	1300	-





Substance Name	Thermal Conduc-tivity		Specif. Heat	Thermal Radiative Properties				Thermal Diffu-sivity	Visco-sity	Thermal Expan-sion							
				Emis-sivity		Reflec-tivity					Absorp-tivity		Trans-missiv.				
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	
Uranium fluorides:																	
UF <sub>4</sub>	-		5	1015	-		-		-		-		-		-		
UF <sub>6</sub>	-		5	1018	-		-		-		-		-		-		
Uranium hydride, UH <sub>3</sub>	-		5	1050	-		-		-		-		-		-		
Uranium iodide, UI <sub>4</sub>	-		5	513	-		-		-		-		-		-		
Uranium nitride, UN	2	672	5	1096	-		-		-		-	10	500	-	13	1152	
Uranium nitride, nonstoichiometric	-		5	1099	-		-		-		-		-		-		
Uranium oxides:																	
UO <sub>2</sub>	2	210	5	259	8	478 485	-		-		8	486	10	402	-	13	413
UO <sub>2</sub> , powder	2	1040	-		-		-		-		-		-		-		
UO <sub>3</sub>	-		5	262	-		-		-		-		-		-		
U <sub>3</sub> O <sub>8</sub>	2	237	5	265	-		-		-		-		-		13	421	
U <sub>4</sub> O <sub>9</sub>	-		5	269	-		-		-		-		-		13	426	
Uranium oxycarbide	-		-		-		-		-		-	10	502	-	-		
Uranium phosphide, UP	-		-		-		-		-		-	10	505	-	13	1178	
Uranium plutonium carbide, UPuC	-		-		-		-		-		-	-	-	-	13	917	
Uranium selenide, USE	-		-		-		-		-		-	-	-	-	13	1192	
Uranium silicides:																	
USi <sub>2</sub>	-		5	619	-		-		-		-	-	-	-	-		
βUSi <sub>2</sub>	-		-		-		-		-		-	-	-	-	13	1213	
USi <sub>3</sub>	-		5	616	-		-		-		-	-	-	-	-		
U <sub>3</sub> Si	-		5	613	-		-		-		-	-	-	-	13	1213	
U <sub>5</sub> Si <sub>2</sub>	-		-		-		-		-		-	-	-	-	13	1213	
Uranium sulfide, US	-		-		-		-		-		-	10	507	-	13	1229	
Uranium trisilicide + tungsten, cermet	-		-		-		-		-		-	-	-	-	13	1342	
Uranus 10	-		-		-		7	1283	-		-	-	-	-	-		
Uranyl oxide	-		5	262	-		-		-		-	-	-	-	-		
Uranyl uranate	-		5	265	-		-		-		-	-	-	-	-		
Valerianic ether	-		6s	38	-		-		-		-	-	-	-	-		
Valerylene	-		6s	73	-		-		-		-	-	-	-	-		
Vanadic anhydride	-		5	281	-		-		-		-	-	-	-	-		
Vanadium, V	1	441	4	271	7	840	7	844 848	7	850	-	10	209	-	12	373	
Vanadium alloys:																	
V + Al	-		4	465	-		-		-		-	-	-	-	-		
V + Cr	-		-		-		-		-		-	-	-	-	12	729	
V + Fe	-	874	4	471	-		-		-		-	-	-	-	-		
V + Fe, Russian, ferrovanadium	1	875	-		-		-		-		-	-	-	-	-		
V + Mo	-		-		-		-		-		-	-	-	-	12	923	
V + Nb	-		-		-		-		-		-	-	-	-	12	955	
V + Sb	-		4	468	-		-		-		-	-	-	-	-		
V + Sn	-		4	474	-		-		-		-	-	-	-	-		

Substance Name	Thermal Conduc- tivity	Specif. Heat	Thermal Radiative Properties				Thermal Diffu- sivity	Visco- sity	Thermal Expan- sion
	V. Page	V. Page	Emis- sivity	Reflec- tivity	Absorp- tivity	Trans- missiv.	V. Page	V. Page	V. Page
Vanadium alloys: (continued)									
V + Ti	-	4 477	-	-	-	-	-	-	12 989
V + Y	1 877	-	-	-	-	-	-	-	-
V + Cr + $\Sigma X_i$	-	-	-	-	-	-	-	-	12 1210
V + Ti + $\Sigma X_i$	-	-	-	-	-	-	-	-	12 1311
Vanadium boride, VB <sub>2</sub>	-	-	8 732	-	-	-	-	-	13 783
Vanadium carbides:									
VC	2 606	5 475	8 850	-	-	-	-	-	13 922
V <sub>2</sub> C	-	-	-	-	-	-	-	-	13 596
Vanadium chlorides:									
VCl <sub>2</sub>	-	5 902	-	-	-	-	-	-	-
VCl <sub>3</sub>	-	5 905	-	-	-	-	-	-	-
Vanadium fluoride, VF <sub>3</sub>	-	5 1021	-	-	-	-	-	-	-
Vanadium hydrides:									
VH	-	-	-	-	-	-	-	-	13 1089
Nonstoichiometric	-	5 1053	-	-	-	-	-	-	-
Vanadium nitrides:									
VN	-	5 1103	8 1087	-	-	-	-	-	13 1163
V <sub>8</sub> N	-	-	8 1087	-	-	-	-	-	-
Vanadium oxides:									
VO	-	5 272	-	-	-	-	-	-	-
VO <sub>2</sub>	-	-	-	-	-	-	-	-	13 430
V <sub>2</sub> O <sub>3</sub>	-	5 275	-	-	-	-	-	-	-
V <sub>2</sub> O <sub>4</sub>	-	5 278	-	-	-	-	-	-	-
V <sub>2</sub> O <sub>5</sub>	-	5 281	-	8 546	-	-	-	-	13 432
Vanadium phosphate, VPO <sub>4</sub>	-	-	-	-	-	-	-	-	13 691
Vanadium silicides:									
VS <sub>2</sub>	-	5 628	8 1173	-	-	-	-	-	13 1214
V <sub>5</sub> Si	-	5 625	-	-	-	-	-	-	13 1214
V <sub>6</sub> Si <sub>3</sub>	-	5 631	-	-	-	-	-	-	13 1214
Verillite	-	-	-	-	-	-	-	-	12 1040
Vermiculite mica, granulated	2 825	-	-	-	-	-	-	-	-
Vinegar acid	-	6s 1	-	-	-	-	-	-	-
Vinegar naphtha	-	6s 35	-	-	-	-	-	-	-
Vinyl acetate	-	6s 95	-	-	-	-	-	-	-
Vinylbenzene	-	6s 84	-	-	-	-	-	-	-
Vinylethylene	-	6s 5	-	-	-	-	-	-	-
Vinyl fluoride	-	6s 41	-	-	-	-	-	-	-
Vinylidene fluoride	-	6s 30	-	-	-	-	-	-	-
Vitreosil, I.R.	-	-	-	-	-	-	-	-	13 365
Vitreous silica	2 184 185 187	-	8 403 405	8 409 413	8 415	8 417 426	-	-	13 360 362 365



Substance Name	Thermal	Specif.	Thermal Radiative Properties				Thermal	Visco-	Thermal
	Conduc-	Heat	Emis-	Reflec-	Absorp-	Trans-	Diffu-	osity	Expan-
	tivity		sivity	tivity	tivity	missiv.	sivity		sion
	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page	V. Page
Wallboard	2 1131	-	-	-	-	-	-	-	-
Wallboard, cornstark	2 1111	-	-	-	-	-	-	-	-
Walnut	2 1089	-	-	-	-	-	-	-	-
Water	3 120	6 102	-	-	-	-	10 390	11 94	13 261
Water, dideuterated	-	6s 95	-	-	-	-	-	-	-
Whiting	-	-	-	-	-	-	10 414	-	-
Wolfram, tungsten	1 415	4 263	-	-	-	-	-	-	-
Wollastonite	2 859	-	-	8 618	-	-	-	-	13 705
Wood, american white	2 1090	-	-	-	-	-	-	-	-
Wood, box	2 1061	-	-	-	-	-	-	-	-
Wood, felt	2 1133	-	-	-	-	-	-	-	-
Wood, fiber blanket	2 1132	-	-	-	-	-	-	-	-
Wood, greenheart	2 1074	-	-	-	-	-	-	-	-
Wood, hardwood	2 1075	-	-	-	-	-	-	-	-
Wood, mineral board processed	2 1141	-	-	-	-	-	-	-	-
Wood, redwood	2 1084	-	-	-	-	-	-	-	-
Wood, redwood bark	2 1084	-	-	-	-	-	-	-	-
Wood, sawdust	2 1085	-	-	-	-	-	-	-	-
Wood, white	2 1090	-	-	-	-	-	-	-	-
Wool, angora	2 1092	-	-	-	-	-	-	-	-
Wool, mineral	2 1147	-	-	-	-	-	-	-	-
Wool, sheep	2 1092	-	-	-	-	-	-	-	-
Wulfenite	-	-	-	8 1673	-	-	-	-	-
Wustite	-	-	-	-	-	-	-	-	13 273
Xenon, Xe	3 88	6 57	-	-	-	-	-	11 62	13 170
Xenon tetrafluoride, XeF <sub>4</sub>	-	5 1024	-	-	-	-	-	-	-
m-Xylene	-	6s 98	-	-	-	-	-	-	-
o-Xylene	-	6s 99	-	-	-	-	-	-	-
p-Xylene	-	6s 101	-	-	-	-	-	-	-
Ytterbia	-	5 284	-	-	-	-	-	-	-
Ytterbium, Yb	1 446	4 274	-	-	-	-	10 212	-	12 382
Ytterbium borides:									
YbB <sub>6</sub>	-	-	8 723	-	-	-	-	-	-
YbB <sub>12</sub>	-	-	-	-	-	-	-	-	13 791
Ytterbium gallium oxide, Yb <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub>	-	5 1620	-	-	-	-	-	-	-
Ytterbium hydride, YbH <sub>2</sub>	-	-	-	-	-	-	-	-	13 1091
Ytterbium oxide, Yb <sub>2</sub> O <sub>3</sub>	-	5 284	8 488	-	-	8 490	-	-	13 435
Ytterbium-zinc intermetallic compound, YbZn <sub>2</sub>	-	-	-	-	-	-	-	-	12 625
Yttria	2 240	5 287	-	-	-	-	-	-	-
Yttrium, Y	1 449	4 278	7 853	-	-	-	10 213	-	12 387
Yttrium aluminate, Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub>	2 308	-	-	-	-	-	-	-	-
Yttrium aluminate garnet	-	-	-	8 579	-	-	-	-	-



Substance Name	Thermal Conductivity		Specif. Heat		Thermal Radiative Properties								Thermal Diffusivity		Viscosity		Thermal Expansion	
	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page	V.	Page
Zinc fluoride, $ZnF_2$	-	-	5	1027	-	-	-	-	-	-	-	-	-	-	-	-	13	1071
Zinc germanium oxide, $2ZnO \cdot GeO_2$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	500
Zinc germanium phosphide, $ZnGeP_2$	2	792	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc iron oxide, $ZnO \cdot Fe_2O_3$	2	314	5	1626	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc diiodine tetrasulfide	-	-	-	-	-	-	-	-	-	-	8	1236	-	-	-	-	-	-
Zinc ferrite	-	-	5	1626	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc oxide, AZO-33, powder compact	-	-	-	-	-	-	8	510 518	-	-	-	-	-	-	-	-	-	-
Zinc oxide, AZO-55L0, powder compact	-	-	-	-	-	-	8	510 518	-	-	-	-	-	-	-	-	-	-
Zinc oxide, AZO-66, powder compact	-	-	-	-	-	-	8	510 518	-	-	-	-	-	-	-	-	-	-
Zinc oxide, Kodak 515	-	-	-	-	-	-	-	8	521	-	-	-	-	-	-	-	-	-
Zinc oxide, ZnO	2	243	5	290	8	506	8	507	8	519 521	8	522	10	408	-	-	13	444
Zinc phosphates:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
$Zn(PO_3)_2$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	684
$Zn_2P_2O_7$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	691
$Zn_3(PO_4)_2$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	681
Zinc selenide, ZnSe	1	1371	-	-	8	1112 1114	8	1117	8	1121	8	1123	-	-	-	-	13	1187
Zinc silicon arsenide, $ZnSAs_2$	1	1374	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc silicate, $Zn_2SiO_4$	-	-	5	1629	-	-	-	-	-	-	-	-	-	-	-	-	13	722
Zinc sulfate heptahydrate, $ZnSO_4 \cdot 7H_2O$	2	694	5	1224	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc sulfide, ZnS	-	-	5	714	8	1213 1215	8	1217 1222	8	1224 1226	8	1227	-	-	-	-	13	1232
Zinc telluride, ZnTe	-	-	-	-	-	-	8	1266	-	-	8	1268	-	-	-	-	13	1265
Zinc titanium oxide, $2ZnO \cdot TiO_2$	-	-	5	1632	-	-	8	660	8	662	-	-	-	-	-	-	-	-
Zinc vanadium oxides:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
$ZnO \cdot V_2O_5$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	598
$2ZnO \cdot V_2O_5$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	599
$3ZnO \cdot V_2O_5$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	600
Zinc-zirconium intermetallic compound, $Zn_2Zr$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	628
Zinc zirconium silicate	-	-	-	-	-	-	-	-	8	616	-	-	-	-	-	-	-	-
Zircon, zirconium dioxide	-	-	-	-	-	-	8	540	-	-	-	-	-	-	-	-	-	-
Zircon, zirconium silicon tetraoxide	-	-	5	1635	8	1685 1687	8	613	8	615	-	-	-	-	-	-	-	-
Zircon, 475	2	318	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zircon, Brazil	2	318	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zircon, Florida	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	725
Zircon, Taylor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	725
Zircon Tam	2	318	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zirconates	-	-	-	-	-	-	8	675	-	-	-	-	-	-	-	-	-	-
Zirconia	2	248	5	293	8	524 526 529 531 533	8	536	8	544	-	-	-	-	-	-	-	-



[illegible]

## MASTER INDEX

Corrections have been made on the following pages:

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